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EOSDIS Core System Project

ECS Project Training Material Volume 13: User Services

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Raytheon Company
Upper Marlboro, Maryland

ECS Project Training Material Volume 13: User Services

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Preface

This document is a contract deliverable with an approval code of 3. As such, it does not require formal Government approval. This document is delivered for information only, but is subject to approval as meeting contractual requirements.

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Abstract

This is Volume 13 of a series of lessons containing the training material for the Earth Observing System Data and Information System (EOSDIS) Core System (ECS). This lesson provides a detailed description of the different tasks that relate to providing support to the user community. The type of services reviewed in this lesson include user account management, processing an order, canceling an order, fulfilling subscriptions, cross-DAAC referral process, and cross-DAAC order tracking.

Keywords: training, instructional design, course objective, user services, subscription, Spatial Subscription Server, Data Pool, order processing, order tracking, Data Dictionary Maintenance Tool, Data Acquisition Request (DAR), ASTER DAR Tool

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Introduction

Identification

Training Material Volume 13 is part of Contract Data Requirements List (CDRL) Item 129, whose requirements are specified in Data Item Description (DID) 625/OP3 and is a required deliverable under the Earth Observing System Data and Information System (EOSDIS) Core System (ECS), Contract (NAS5-60000).

Scope

Training Material Volume 13 describes the processes and procedures to accomplish ECS User Services functions. This lesson is designed to provide the operations staff with sufficient knowledge and information to satisfy all lesson objectives.

Purpose

The purpose of this Student Guide is to provide a detailed course of instruction that forms the basis for understanding User Services. Lesson objectives are developed and will be used to guide the flow of instruction for this lesson. The lesson objectives will serve as the basis for verifying that all lesson topics are contained within this Student Guide and slide presentation material.

Status and Schedule

This lesson module provides detailed information about training for the current baseline of the system. Revisions are submitted as needed.

Organization

This document is organized as follows:

Introduction:	The Introduction presents the document identification, scope, purpose, and organization.
Related Documentation:	Related Documentation identifies parent, applicable and information documents associated with this document.
Student Guide:	The Student Guide identifies the core elements of this lesson. All Lesson Objectives and associated topics are included.
Slide Presentation:	Slide Presentation is reserved for all slides used by the instructor during the presentation of this lesson.

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Related Documentation

Parent Document

The parent document is the document from which this ECS Training Material's scope and content are derived.

423-41-01 Goddard Space Flight Center, EOSDIS Core System (ECS) Statement of Work

Applicable Documents

The following documents are referenced within this ECS Training Material, or are directly applicable, or contain policies or other directive matters that are binding upon the content of this document:

420-05-03 Goddard Space Flight Center, Earth Observing System (EOS) Performance Assurance Requirements for the EOSDIS Core System (ECS)

423-41-02 Goddard Space Flight Center, Functional and Performance Requirements Specification for the Earth Observing System Data and Information System (EOSDIS) Core System (ECS)

Information Documents

Information Documents Referenced

The following documents are referenced herein and amplify or clarify the information presented in this document. These documents are not binding on the content of the ECS Training Material.

609-CD-610 Release 6B Operations Tools Manual for the ECS Project

611-CD-610 Mission Operation Procedures for the ECS Project

910-TDA-022 Custom Code Configuration Parameters for ECS

Information Documents Not Referenced

The following documents, although not referenced herein and/or not directly applicable, do amplify or clarify the information presented in this document. These documents are not binding on the content of the ECS Training Material.

305-CD-610 Release 6B Segment/Design Specification for the ECS Project

311-CD-620 Release 6B Data Management Subsystem Database Design and Schema Specifications for the ECS Project

311-CD-621 Release 6B INGEST (INS) Database Design and Schema Specifications for the ECS Project

311-CD-623 Release 6B Planning and Data Processing Subsystem Database Design and Schema Specifications for the ECS Project

311-CD-624 Release 6B Science Data Server Database Design and Schema Specifications for the ECS Project

311-CD-625 Release 6B Storage Management and Data Distribution Subsystem Database Design and Database Schema Specifications for the ECS Project

311-CD-626 Release 6B Subscription Server Database Design and Schema Specifications for the ECS Project

311-CD-627 Release 6B Systems Management Subsystem Database Design and Schema Specifications for the ECS Project

311-CD-628 Release 6B Registry Database Design and Schema Specifications for the ECS Project

311-CD-630 Release 6B PDS Subsystem Database Design and Database Schema Specifications for the ECS Project

311-CD-631 Release 6B NameServer Database Design and Schema Specifications for the ECS Project

313-CD-610 Release 6B ECS Internal Interface Control Document for the ECS Project

334-CD-610 6B Science System Release Plan for the ECS Project

601-CD-001 Maintenance and Operations Management Plan for the ECS Project

603-CD-003 ECS Operational Readiness Plan for Release 2.0

604-CD-001 Operations Concept for the ECS Project: Part 1-- ECS Overview

604-CD-002 Operations Concept for the ECS Project: Part 2B -- ECS Release B

605-CD-002 Release B SDPS/CSMS Operations Scenarios for the ECS Project

607-CD-001 ECS Maintenance and Operations Position Descriptions

152-TP-001 ACRONYMS for the EOSDIS Core System (ECS) Project

152-TP-003 Glossary of Terms for the EOSDIS Core System (ECS) Project

211-TP-007 Transition Plan 6A.04 to 6A.XX (6A.05) for the ECS Project

220-TP-001 Operations Scenarios - ECS Release B.0 Impacts

300-TP-002 Database Descriptions for Synergy III

500-1002 Goddard Space Flight Center, Network and Mission Operations Support (NMOS) Certification Program, 1/90

535-TIP-CPT-001 Goddard Space Flight Center, Mission Operations and Data Systems Directorate (MO&DSD) Technical Information Program Networks Technical Training Facility, Contractor-Provided Training Specification

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User Services Overview

Lesson Overview

This lesson will provide you with the process for ECS user account management, processing an order, canceling an order, fulfilling a subscription, data dictionary maintenance, cross-DAAC referral processing, and cross-DAAC order tracking. It provides practical experience in using the tools you will need for creating and managing user accounts, processing, tracking, and canceling orders, managing subscriptions, and cross-DAAC referrals and order tracking to support ECS users.

Lesson Objectives

Overall Objective - The overall objective of this lesson is proficiency in the methodology and procedures for providing support to the users of the Earth Observing System Data and Information System (EOSDIS) Core System (ECS).

Condition - The student will be given a workstation console with access to ECS software tools including trouble ticket/contact log, fault/performance management, order tracking, and user profile graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, and a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*.

Standard - The student will use the tools in accordance with prescribed methods and complete required procedures without error.

Specific Objective 1 - The student will describe the User Services role, identifying the major responsibilities of User Services.

Condition - The student will be given a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*.

Standard - The student will correctly state the User Services role in ECS, correctly identifying five major responsibilities of User Services Personnel.

Specific Objective 2 - The student will perform user account management, including retrieving a user account, creating a user account, editing/modifying an existing account, deleting an ECS account, canceling an ECS account, and changing an ECS user's password.

Condition - The student will be given a workstation console with access to ECS user profile graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, and a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required user account management functions.

Specific Objective 3 - The student will perform the functions required to cancel/track an order.

Condition - The student will be given a workstation console with access to ECS trouble ticket/contact log and search and order tool graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and a user request to cancel a data order.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required order cancellation functions.

Specific Objective 4 - The student will perform the functions required to support fulfilling subscriptions, including fulfilling a one-time subscription, fulfilling an open-ended subscription, returning a list of subscriptions, and canceling a subscription.

Condition - The student will be given a workstation console with access to ECS trouble ticket/contact log, user profile, and subscription editor graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and user requests for subscription actions.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required subscription support functions.

Specific Objective 5 - The student will perform the functions required to manage the Data Pool, including using the Spatial Subscription Server GUI (NSBRV GUI) to add Data Pool qualification and retention criteria, using the NSBRV GUI to extend the period of retention in a Data Pool insert subscription, using the NSBRV GUI to update a subscription in the NTSRV database, using the NSBRV GUI to delete (cancel) a subscription in the NSBRV database, using the NSBRV GUI to manage bundling orders, using the NSBRV GUI to view the Acquire and Notification actions currently being processed by the Spatial Subscription Server, and using the NSBRV GUI to view statistics on processing of events and actions by the Spatial Subscription Server.

Condition - The student will be given a workstation console with access to Spatial Subscription Server GUI tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and requirements for Data Pool management actions.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required Data Pool management functions.

Specific Objective 6 - The student will perform the functions required to use the Data Pool web interface to select and download data from the Data Pool.

Condition - The student will be given a workstation console with access to a web browser and the Data Pool web interface, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and requirements for locating and downloading data from the Data Pool.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required location and download functions.

Specific Objective 7 - The student will perform functions required for data dictionary maintenance, importing valids, and exporting valids.

Condition - The student will be given a workstation console with access to ECS trouble ticket/contact log, user profile, and search and order tool graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and a user request for data not available at the home DAAC.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required data dictionary maintenance functions.

Specific Objective 8 - The student will perform a cross-DAAC referral.

Condition - The student will be given a workstation console with access to ECS trouble ticket/contact log, user profile, and search and order tool graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and a user request for data not available at the home DAAC.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required cross-DAAC referral.

Specific Objective 9 - The student will perform cross-DAAC order tracking.

Condition - The student will be given a workstation console with access to ECS trouble ticket/contact log, user profile, and search and order tool graphical user interface (GUI) tools, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and a user request for status information concerning an order that requires cross-DAAC tracking.

Standard - The student will use the GUI tools without error in accordance with applicable procedures to perform the required cross-DAAC order tracking.

Specific Objective 10 (for EDC only) - The student will perform operations related to creation and modification of a Data Acquisition Request (DAR), including preparing and submitting a DAR and modifying an existing DAR.

Condition - The student will be given a workstation console with access to the Netscape web browser, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and a scientist's request for preparation of a DAR.

Standard - The student will use the DAR GUI tools without error in accordance with applicable procedures to perform the required DAR submission and modification.

Specific Objective 11 (for EDC only) - The student will perform operations using the HTML interface to the ASTER On-Demand Form Request Manager (ODFRM) to create an ASTER Production Request.

Condition - The student will be given a workstation console with access to the Netscape web browser, a copy of 609-CD-610-003 *Release 6B Operations Tools Manual for the ECS Project*, a copy of 611-CD-610-002 *Mission Operation Procedures for the ECS Project*, and a scientist's request for creation of an ASTER Production Request.

Standard - The student will use the ODFRM GUI tools without error in accordance with applicable procedures to perform the required ASTER Production Request.

Importance

This lesson provides students who will be User Services Representatives at the DAACs with the knowledge and skills needed for effective user assistance in order tracking, creation/management of user accounts, resolving user requests/problems, initiating and tracking system problem reports, obtaining user comments/feedback, and coordination with external/internal sources to resolve user problems. It is also useful to those who will be System Engineers, System Test Engineers, and Maintenance Engineers, to prepare them for supporting user problem resolution.

The User Services Role

The entire potential ECS user population includes scientists, graduate and undergraduate students, and students in grades K-12, as well as teachers, who may use ECS to pull data from the DAACs for a range of studies in basic and applied research and for educational programs. User Services is the arm of each DAAC providing extensive support services to these “pull users” for each product archived at the DAAC. In this role, User Services exercises five major responsibilities:

- help create new users – creating new accounts and performing other account management activities.
- support order tracking – keeping logs of user contacts, retrieving user information, and helping trace and report the status of order processing.
- resolve user requests/problems – respond to user requests and act on behalf of users to provide ECS services and products.
- initiate/track problem reports – initiate an ECS problem report based on a user called-in (or e-mailed) advice of a system problem (i.e., an instance in which the system does not conform to specified or advertised performance).
- coordinate external and internal sources to resolve user issues/problems – respond to user issues and resolve problems by identifying and energizing the necessary resources, both internal (e.g., DAAC operations personnel) and external (e.g., engineering from the Sustaining Engineering Organization, resources from the System Monitoring and Control Center, personnel from other DAACs).

User Services Relationships in ECS

Figure 1 shows User Services relationships in ECS, illustrating the importance of User Services as an optional way to access ECS services. User Services is a “super user” that can provide users with assistance in all aspect of accessing ECS services or even act as a surrogate for the user. As a surrogate, User Services may respond to a telephone request or e-mail request and perform all functions required to obtain ECS services on the user’s behalf. As indicated in the figure, these responsibilities may entail a wide range of activities, including:

- user transaction activities.
- statistical activities.
- data set histories.
- library and advertising activities.

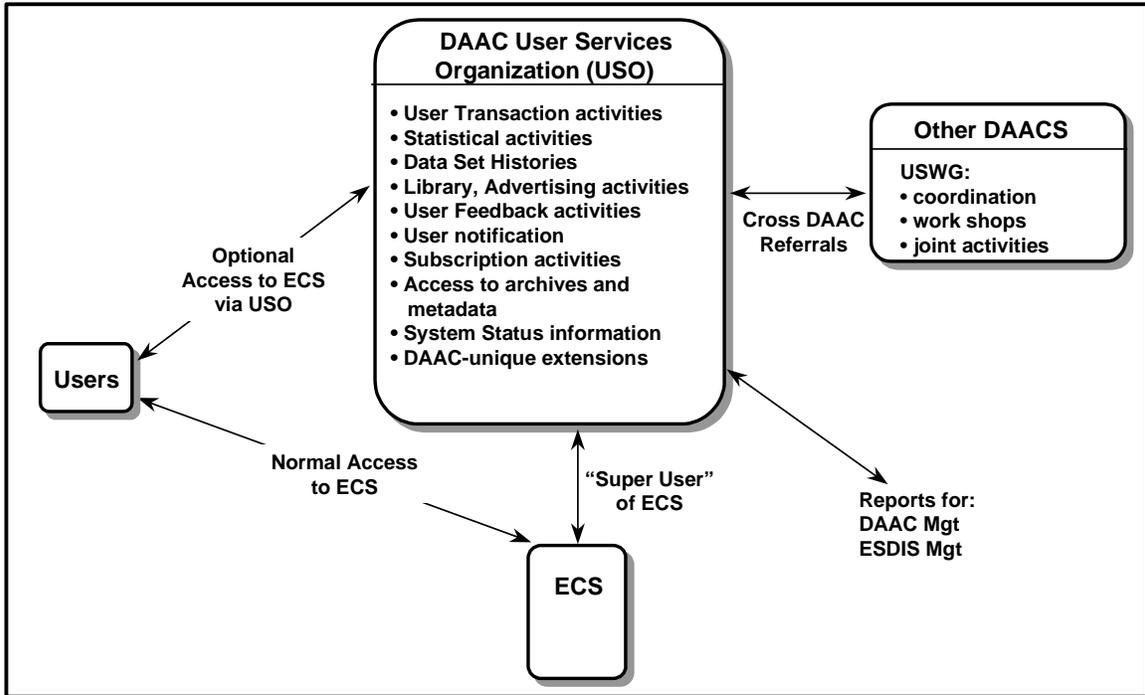


Figure 1. User Services and Relationships in ECS

- user feedback activities.
- user notification.
- subscription activities.
- access to archives and metadata.
- system status information.
- DAAC-unique extensions.

ECS User Account Management

User Services representatives have primary responsibility for ECS user account management. There are several procedures needed for managing ECS accounts:

- Retrieving a user account.
- Creating a user account.
- Editing/modifying an existing account.
- Deleting an ECS account.
- Canceling an ECS account.
- Changing an ECS user's password.

You can retrieve a user account using Account Management Graphical User Interfaces (GUIs) local to your site. Creating or modifying a user account, however, requires remote access to Account Management GUIs at the System Monitoring and Coordination Center (SMC).

Retrieving a User Account

One of the first things a User Services Representative may want to do when contacted by a user for any request is to search to determine if that user has an account and to retrieve it (if the user is a new user, the representative may guide that user to register so that an account may be created; these processes are addressed later in this lesson). The information in the account serves at least two purposes:

- validates user.
- provides information that may be needed to respond.

There is a separate procedure in 611-CD-610-002 *Mission Operation Procedures for the ECS Project* for retrieving a user account. However, as we will see, retrieving an account is part of other procedures as well, such as:

- processing an order.
- canceling an order.
- order tracking.

Retrieval of a user account is accomplished by accessing the **Profile Account** screen of the ECS User Account Management tool. Figure 2a and Figure 2b illustrate the Personal Information and Account Information sub-tabs of this screen. At the DAAC, the Profile Account screen is the only top-level tab available. The tool at the SMC has a second major tab, **Request Account**, as illustrated in Figure 3a and Figure 3b. Note that the SMC tool has buttons at the bottom of the screen permitting the operator to modify account data.

ECS User Account Management—Mode: TS2

File Edit Help

Profile Account

Last Name	First Name	MI	User ID	Email Address	DAAC	Creation Date	Expiration Date
Rattigan	Joan		jrattiga	jrattiga@t1ins02u.ecs.nasa.gov	GSF	06/15/00 15:14	06/15/02 00:00
Ritter	Stephanie		sritter	sritter@eos.hitc.com	EDC	08/25/00 11:37	08/25/02 00:00
Share	CM	M	cmshared	cmshared@p0ins01u.ecs.nasa.gov	PVC	02/21/01 14:22	02/21/03 00:00
Suzuki	Hanako		hsuzuk1	xwu@eos.hitc.com	EDC	06/13/01 10:44	06/13/03 00:00
Sydney	Janisse		jsydney	cm2s2@t1ins01u.ecs.nasa.gov	EDC	01/26/01 14:20	01/26/03 00:00
TEST	ECS		ECSTEST	cm2s2@t1ins01u.ecs.nasa.gov	EDC	01/26/01 15:32	01/26/03 00:00
Test	Test	s	Test21	dqwwdqd	EDC	01/26/01 09:30	01/26/03 00:00
test	test		Test23	aaaa	LAR	01/26/01 10:20	01/26/03 00:00
tester	test	t	ttester	vkhaqtri@eos.hitc.com	PVC	07/13/01 15:18	
Three	User		user3	cm2s2@t1ins02u.ecs.nasa.gov	EDC	11/17/00 10:52	11/17/02 00:00

Find

Retrieve by DAAC: ALL User ID Last Name: Retrieve

Personal Information Billing Address Shipping Address Mailing Address Account Information DAR Information

Title: Ms First Name: Joan MI: Last Name: Rattigan

Email: jrattiga@t1ins02u.ecs.nasa.gov User ID: jrattiga

Organization: ECS Affiliation: Commercial

User Verification Key: ECS Home DAAC: GSF

Project: ECS Primary Area of Study:

Figure 2a. DAAC Account Management Tool: Profile Account Screen, Personal Information

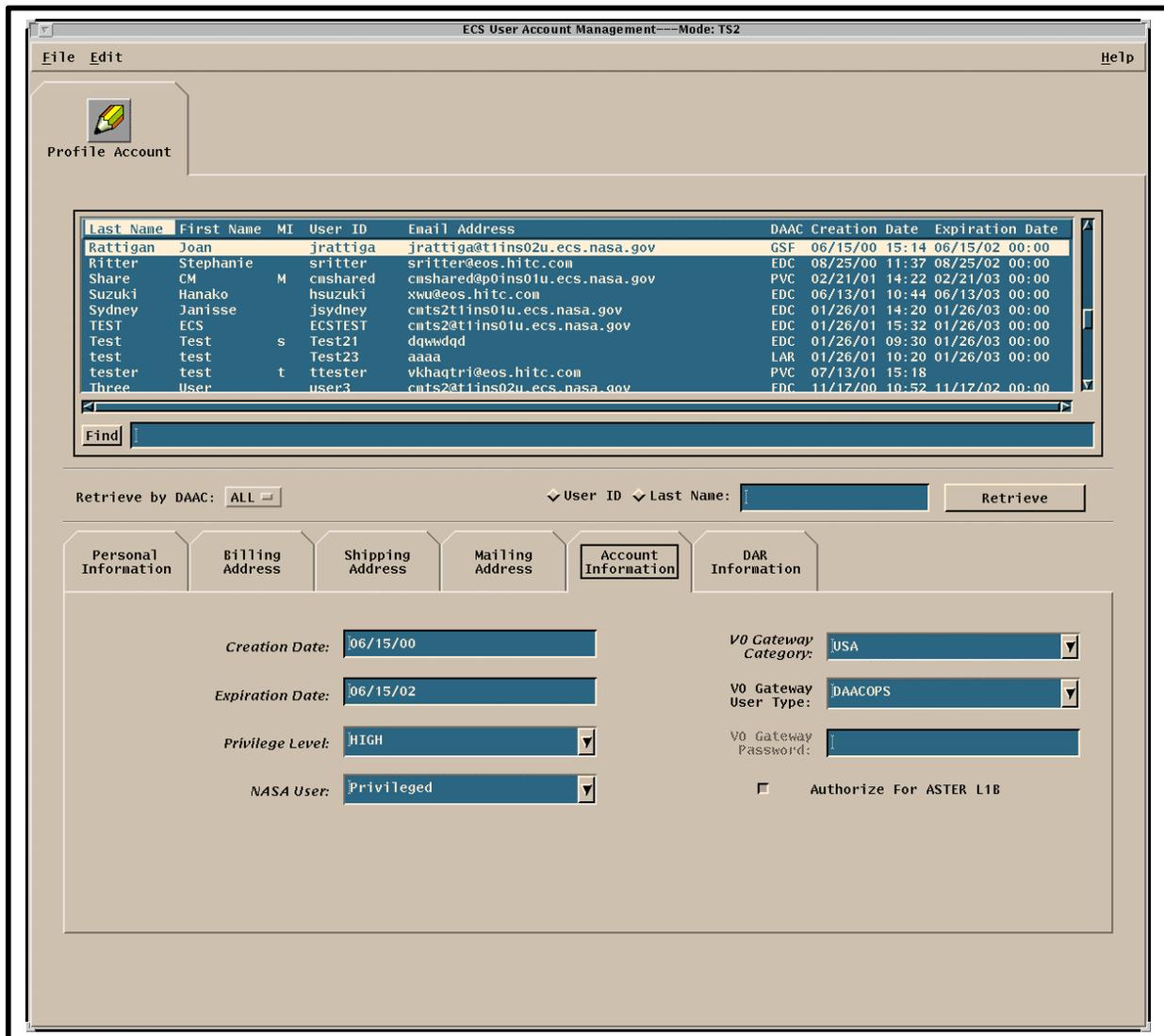


Figure 2b. DAAC Account Management Tool: Profile Account Screen, Account Information

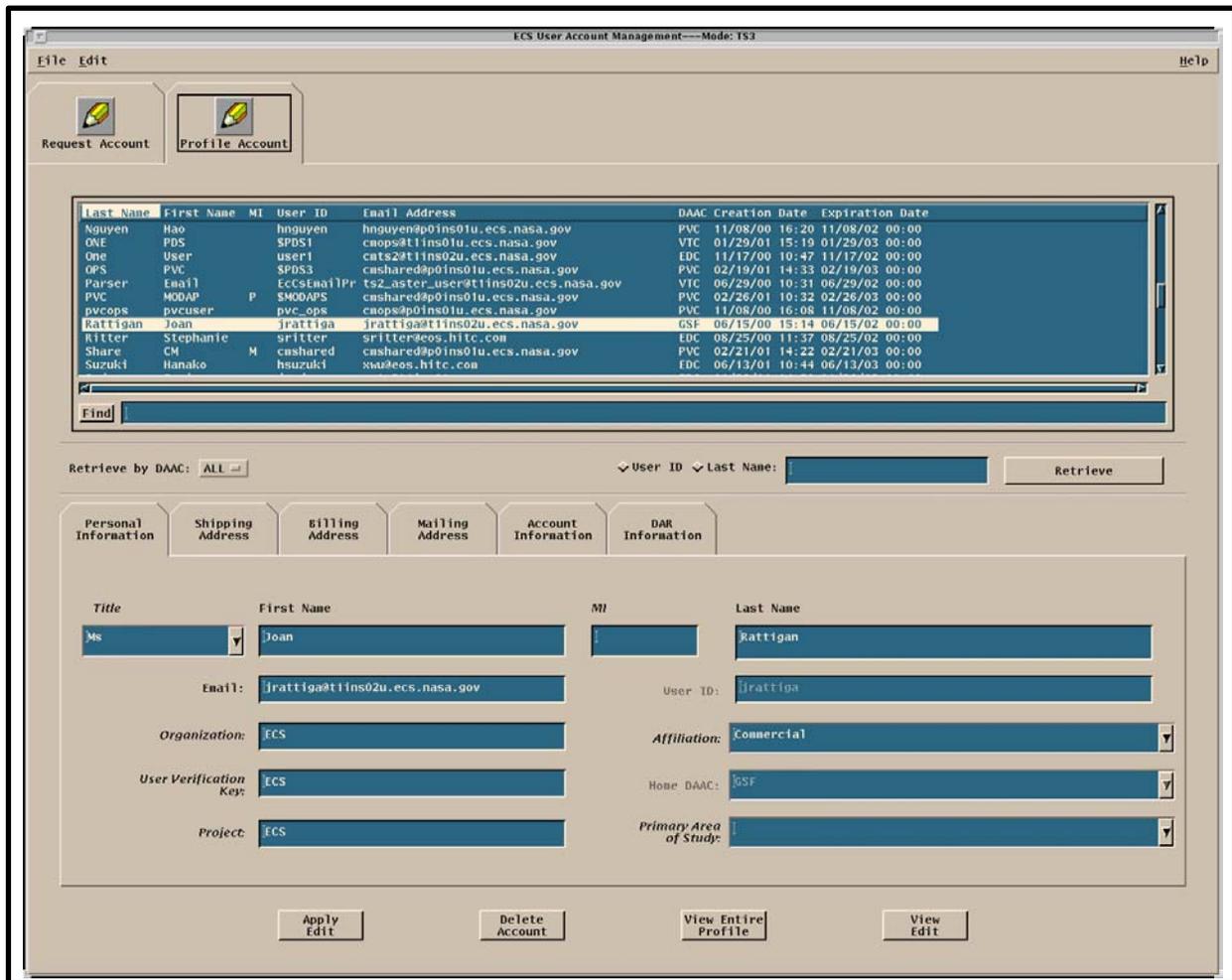


Figure 3a. SMC Account Management Tool: Profile Account Screen, Personal Information

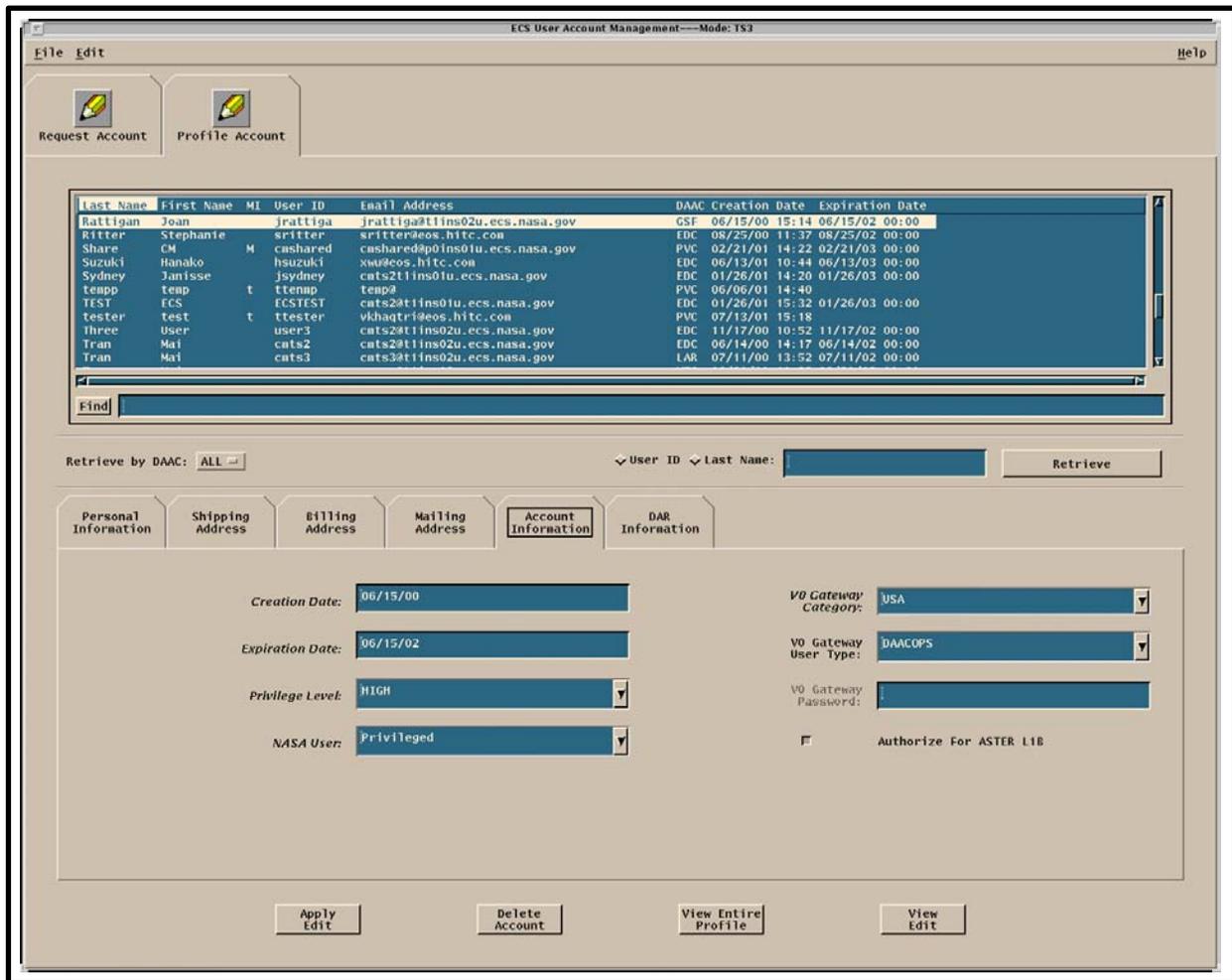


Figure 3b. SMC User Account Management Tool: Profile Account Screen, Account information

Access to the Account Management functions at the DAAC or at the SMC is gained through the use of UNIX commands. Launching the account management application starts with the assumption that the applicable servers are running and the operator has logged in to the ECS system or has logged in remotely to the SMC. To launch Account Management graphical user interfaces (GUIs), use the following procedure.

Launch Account Management application using UNIX commands

- 1 Access the command shell
 - The command shell prompt is displayed.
 - 2 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
 - 3 Start the log-in to the MSS client server by typing **/tools/bin/ssh *hostname*** (*e.g.*, g0mss21, 10mss21, e0mss21, n0mss21, m0mss16) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase; go to Step 5.
 - 4 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 6.
 - 5 At the *<user@remotehost>*'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - 6 To change to the directory containing the utility scripts to start Account Management GUIs, type **cd /*path*** and then press the **Return/Enter** key.
 - For *path*, use **/usr/ecs/*mode*/CUSTOM/utilities**, where *mode* will likely be **TS1**, **TS2**, or **OPS**.
 - 7 Type **EcMsAcDAACRegUserGUIStart *mode*** (to launch the GUI at your local site) or **EcMsAcSMCRegUserGUIStart *mode*** (to launch the GUI at the SMC), where *mode* is **TS1**, **TS2**, or **OPS** (or other) as selected in Step 6.
 - The ECS User Account Management window is displayed.
 - On the SMC tool, the window shows two folders: “Request Account,” and “Profile Account;” on the DAAC tool, only the “Profile Account” folder appears.
-

Suppose you want to retrieve the account of a user named Robert Goddard. Use the following procedure.

Retrieve User Account/Validate a User

- 1** Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - 2** If necessary, click the “**Profile Account**” folder tab to display it.
 - Folders and fields applicable to existing accounts are displayed.
 - 3** Click on the **Retrieve by DAAC** option button and select your DAAC from the displayed list, or select **All**.
 - The selected choice is displayed on the option button.
 - 4** Click on the **Retrieve** button.
 - The account list field displays the list of accounts for the option selected in Step 3.
 - 5** Retrieve the user’s profile information by entering a search criterion (in this case, enter **Goddard**) in the “**Find**” field and then pressing **Return**.
 - The “**Find**” field is located to the right of the **Find** button.
 - The scroll box displays a list of accounts that match the search criteria.
 - You can create a search by entering the user’s **Last Name, E-mail address, or user ID**.
 - 6** Scroll through the accounts listed until the desired account (for **Robert Goddard**) is highlighted, then double click.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information**.
 - 7** Click on each folder you desire to display. The user account information that you need in order to validate the user is displayed.
-

Creating a User Account

User registration begins when a user requests ECS data services. Requests for data may come in by mail, telephone, e-mail, fax, or in person. The User Services representative assists the user in one of two ways:

- refer the user to the Universal Reference Locator (URL) for the EOS Data Gateway (EDG), where there are links for access to data as well as a link permitting a user to register.
 - *Note:* The URL is <http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/>.
- enter the registration data on behalf of the user.

If the request is by mail, fax, or e-mail from the user, some of the information needed for registration may be missing, in which case it is necessary to call the user directly to obtain the needed data. Registration involves entry of data in five categories:

- Personal Information.
- Mailing Address.
- Shipping Address.
- Billing Address.
- Account Information.

If the user registers through **Become a registered user** link on the EDG, that link is found on the welcome page as illustrated in Figure 4. A click on the link provides access to a User Registration data entry page similar to that shown in Figure 5. As noted in the paragraph at the top of the form shown in Figure 5, filling in and submitting this form registers the user for access to all NASA data that may be ordered through the EDG, including ECS data. In this “seamless” user registration, the registration information is used to create a basic ECS account in a database at a central location (at the System Monitoring and Control Center), and then it is replicated to the User Profile databases at all DAACs. If a user needs special privileges (e.g., submit an ASTER Data Acquisition Request, On-Demand Requests for certain ASTER products, access restricted data granules), the user requests the needed authorization from User Services at their home DAAC. The User Services representative logs in remotely to the SMC and changes the basic User Profile to include the special privilege(s), which are then replicated to the databases at the DAACs.

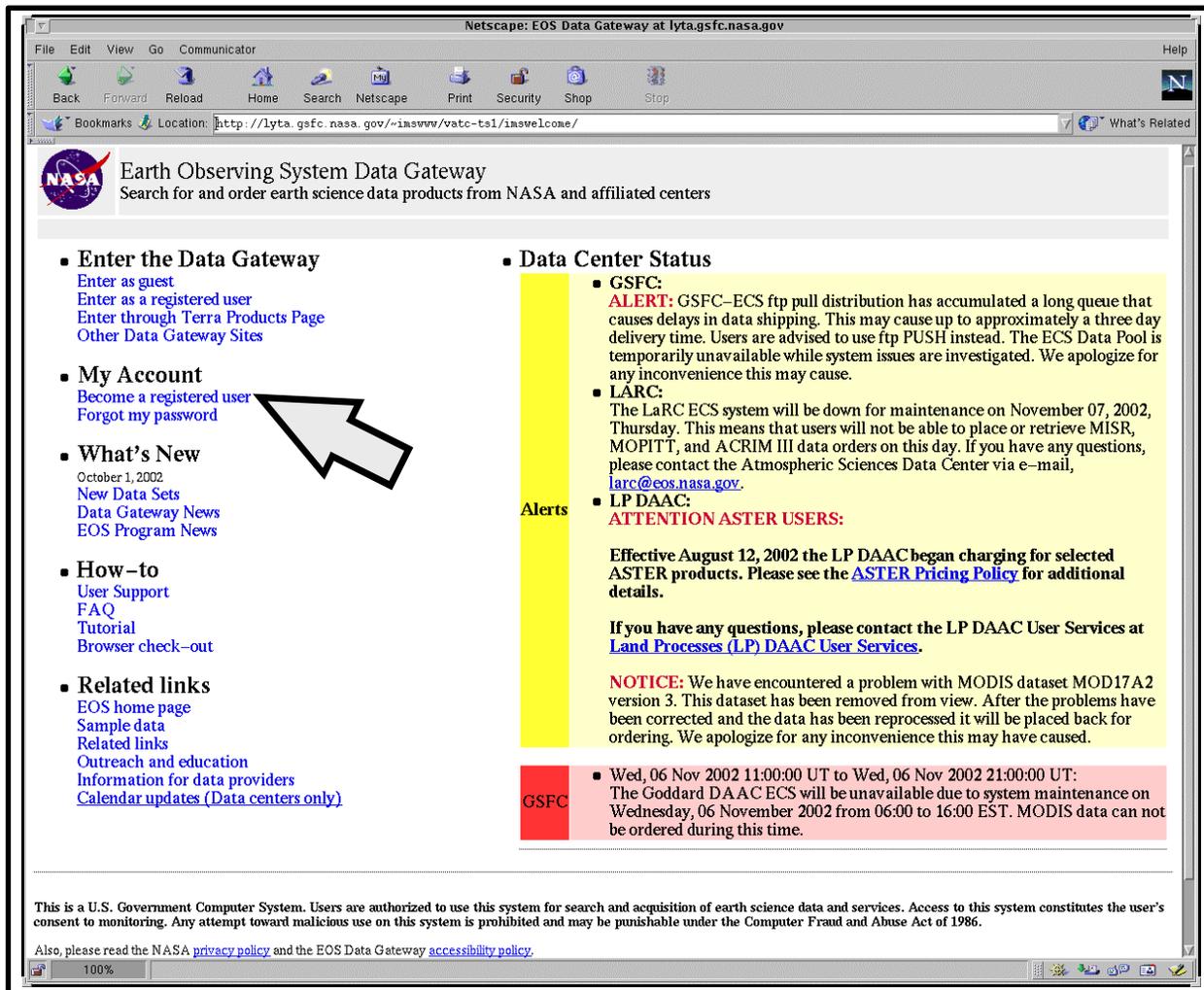


Figure 4. EOS Data Gateway Welcome Page showing registration link

The data entry form shown in Figure 5 is the form used to register seamlessly for access to ECS and V0 data and services. A click on the **Continue** button at the bottom provides access to the **Username/Password** form (see Figure 6). On this form, the user enters and confirms the password to be used with the account, and may change or simply accept the system generated user name before activating the **Submit Registration** button.

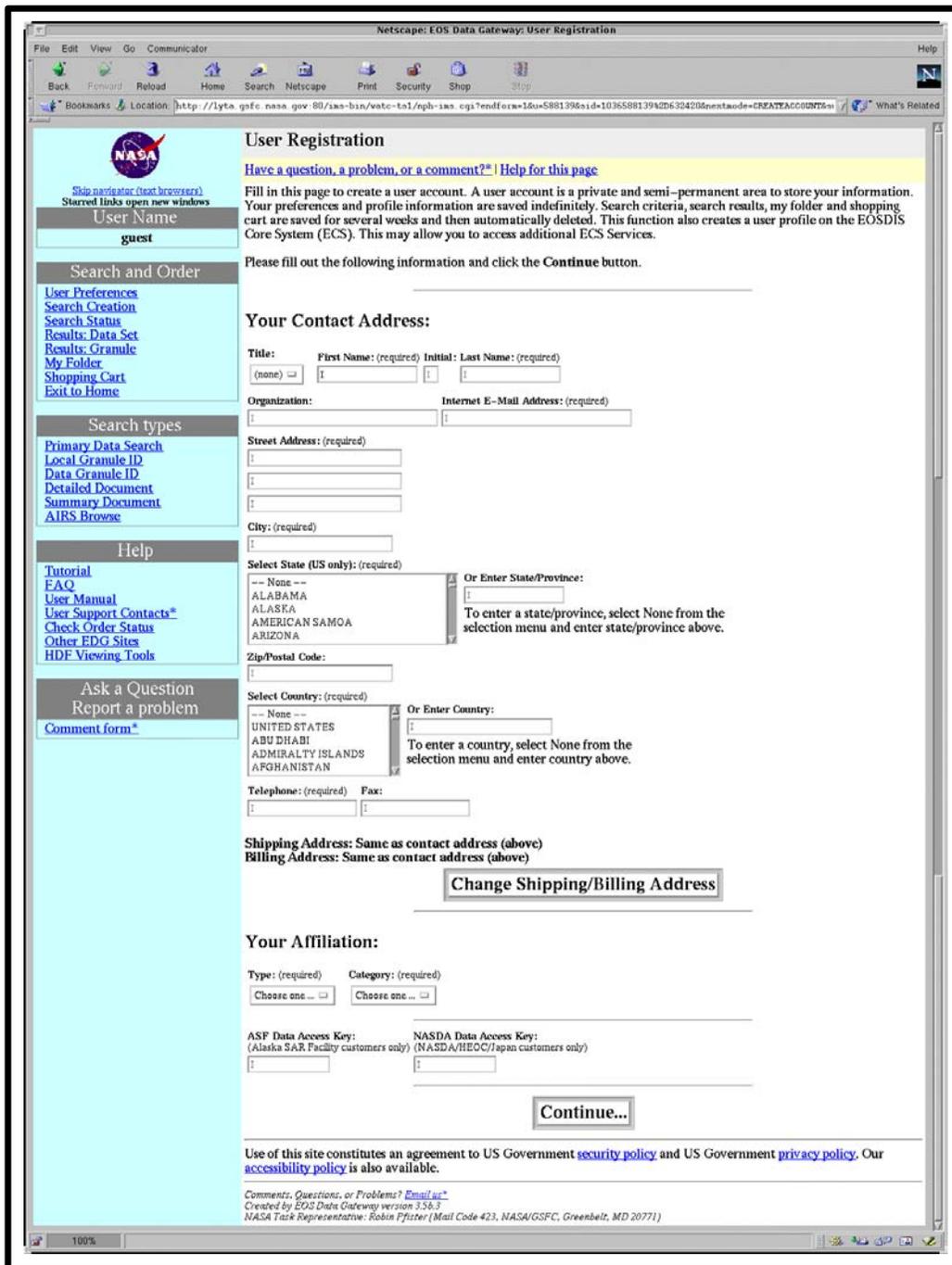


Figure 5. User Registration data entry page

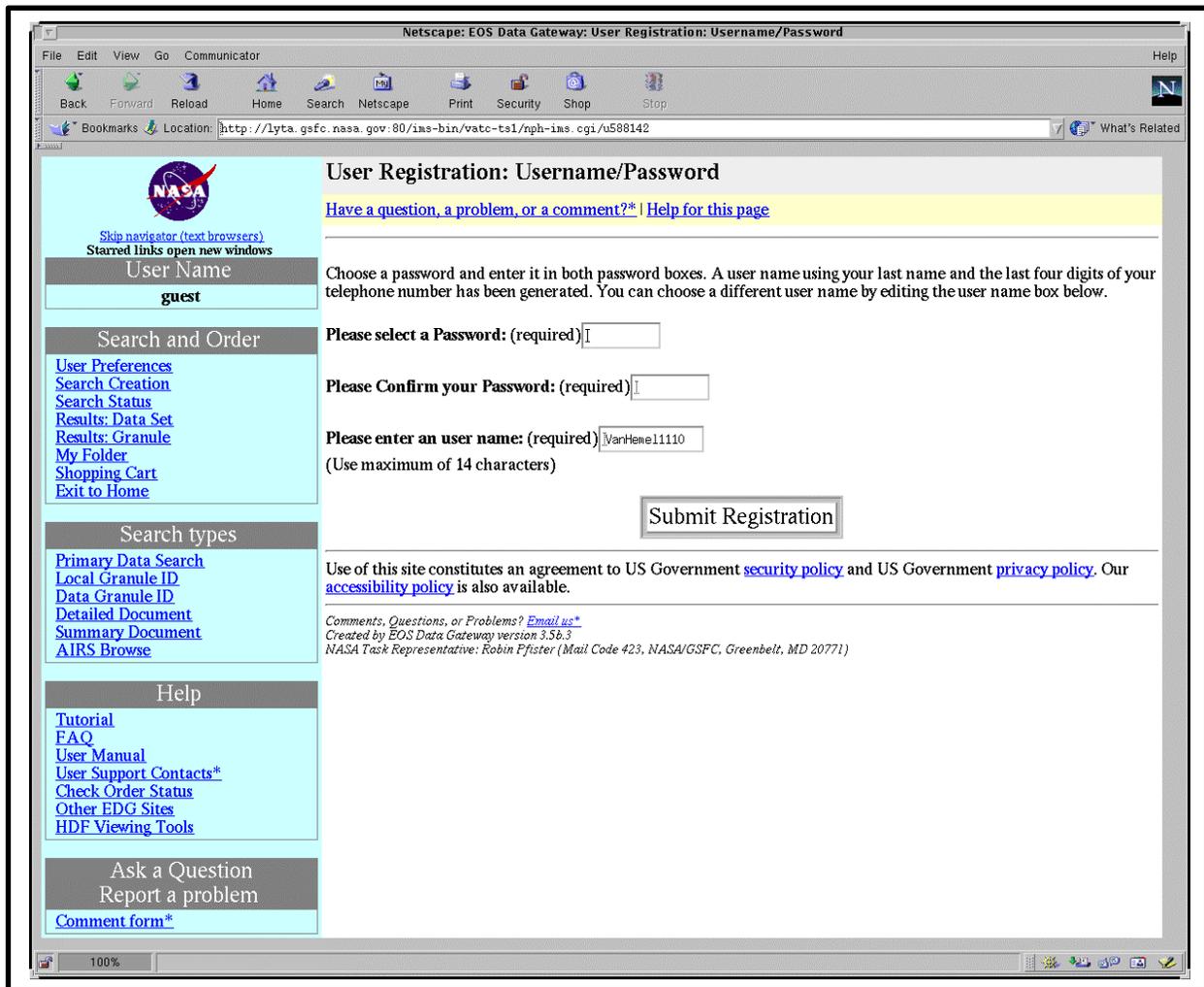


Figure 6. User Registration: Username/Password form

User registration may be accomplished from the Request Account screen of the ECS User Account Management tool, accessed remotely at the SMC. Figure 7 shows the Account Information tab of this screen.

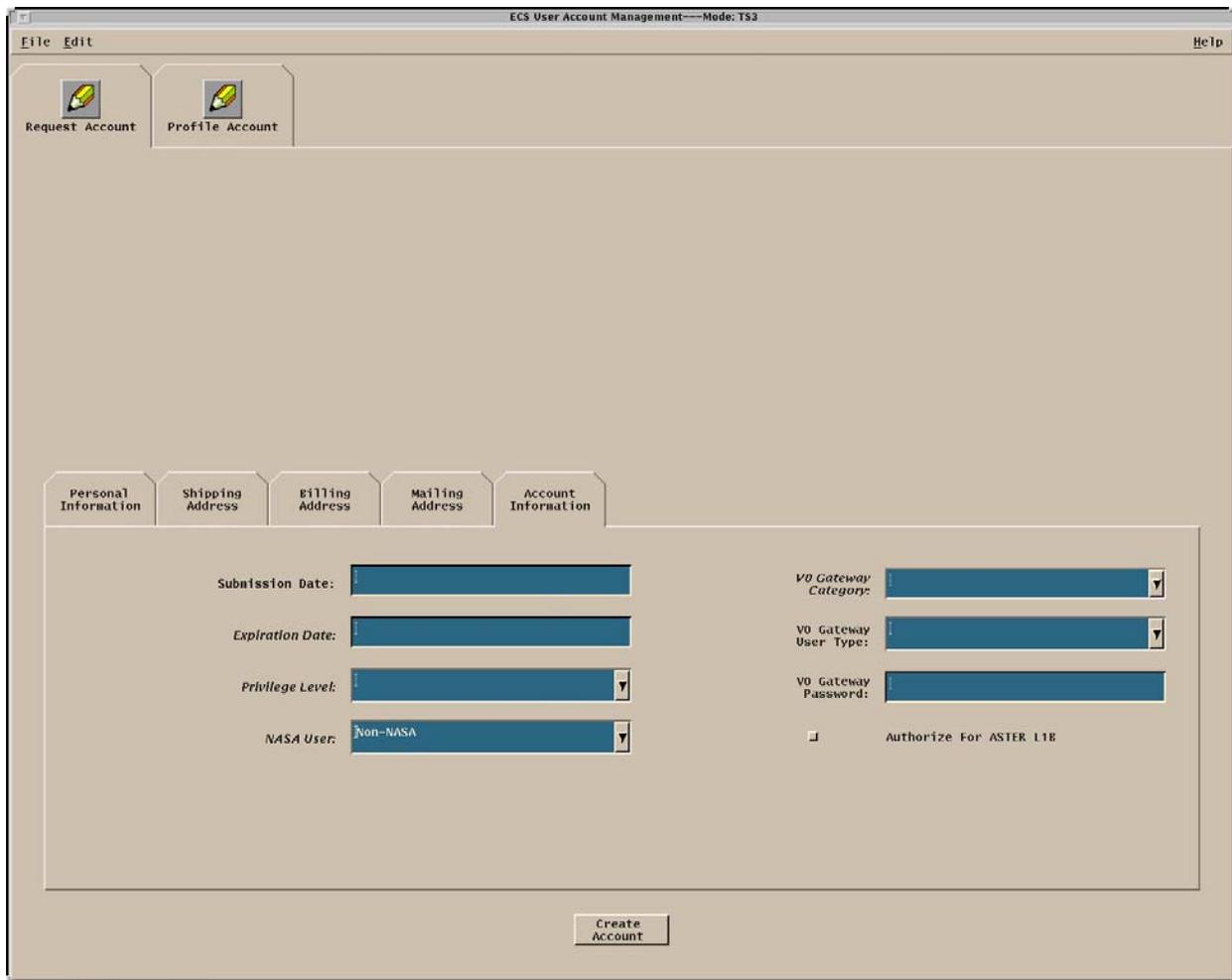


Figure 7. SMC Account Management Tool: Request Account Screen, Account Information Tab

Suppose you receive a fax with a request for data from Dr. Phyllis A. Scientist, a chemical engineer at Hampton University, working on the Stratospheric Aerosol and Gas Experiment (SAGE III) project. Data needed to register Dr. Scientist as an ECS user are:

Title and Name: Dr. Phyllis A. Scientist
E-mail address: pascient@enr.1.engr.hamptonu.edu
User ID: pascient
Organization: Hampton University
Telephone: 804-727-5532
User Verification Key: Madre
Affiliation: University
Project: SAGE III
Home DAAC: LaRC DAAC (LAR)
Primary Area of Study: Atmospheric Aerosols LaRC
Shipping Address: Department of Chemical Engineering
Hampton University
Hampton, VA 23668
(Phone: 804-727-5532 Fax: 804-727-4033)
Billing Address: Accounts Payable
Hampton University
Hampton, VA 23668
(Phone: 804-727-4066 Fax: 804-727-4004)
Mailing Address: Department of Chemical Engineering
Hampton University
Hampton, VA 23668
(Phone: 804-727-5532 Fax: 804-727-4033)

Let's examine how to enter the needed data to register a user. The first block of information to enter is the account information. Assume your DAAC requires that an expiration date for new accounts be set for one year from initial registration, so that accounts will be automatically deleted at that time unless reconfirmed by the user. Use the following procedure.

Create a User Account: Account Information

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
- 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: “**Request Account**,” and “**Profile Account**.”
- 3 Click the “**Request Account**” folder tab.
 - The window displays five folders.
- 4 Click the “**Account Information**” folder.
 - The “**Account Information**” folder opens.
- 5 Click on the “**Expiration Date**” field.
 - The cursor moves to the “**Expiration Date**” field.
- 6 Enter the **Expiration Date** only if required by the DAAC for new accounts, then press **Tab**.
 - The cursor moves to the “**Privilege Level**” field.
- 7 Click on the pull-down arrow next to the “**Privilege Level**” field.
 - A pull-down menu appears with choices of **XPRESS**, **VHigh**, **HIGH**, **NORMAL**, and **LOW**.
- 8 Click on the choice **NORMAL**.
 - **NORMAL** appears in the “**Privilege Level**” field.
- 9 Click on the pull-down arrow next to the “**NASA User**” field.
 - A pull-down menu appears with choices of **Privileged**, **Regular**, and **Non-NASA**.
- 10 Click on the choice **Non-NASA**.
 - **Non-NASA** appears in the “**NASA User**” field.
- 11 Click on the pull-down arrow next to the “**V0 Gateway Category**” field.
 - A pull-down menu appears with the choices of **USA** and **Non-USA**.

12 Click on the choice **USA**.

- **USA** appears in the "**V0 Gateway Category**" field.

13 If the user is to be authorized for ASTER L1B requests, click on the check box next to **Authorize for ASTER L1B**.

- A check mark is displayed in the box.
- The **Account Information** folder is complete; go to next folder.

The next block of data to be entered is user's personal information. If you have just entered the account information, the "**Request Account**" folder is still open. To add the user's personal information, you will need the "**Personal Information**" tab of this folder (Figure 8).

The screenshot shows a web application window titled "ECS User Account Management—Mode: Y53". The window has a menu bar with "File", "Edit", and "Help". Below the menu bar are two icons: "Request Account" and "Profile Account". The main content area features a tabbed interface with five tabs: "Personal Information", "Shipping Address", "Billing Address", "Mailing Address", and "Account Information". The "Personal Information" tab is active, displaying a form with the following fields:

Title	First Name	MI	Last Name
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Email:	<input type="text"/>	User ID:	<input type="text"/>
Organization:	<input type="text"/>	Affiliation:	<input type="text"/>
User Verification Keys:	<input type="text"/>	Hone DAAC:	<input type="text"/>
Project:	<input type="text"/>	Primary Area of Study:	<input type="text"/>

At the bottom of the form is a "Create Account" button.

Figure 8. SMC Account Management Tool: Request Account Screen, Personal Information Tab

Use the following procedure.

Create a User Account: Personal Information

- 1** Click the “**Personal Information**” folder.
 - The “Personal Information” folder opens.
- 2** Click on the “**Title**” field.
 - The cursor moves to the “**Title**” field.
- 3** Enter the user’s **Title**, then press **Tab**.
 - A pull-down menu is available and may be used instead of typing the **Title**:
 - a Point the mouse on the arrow to the right of the “**Title**” field.
 - b While holding the mouse pointer button down, **highlight** the **Title** you require (in this case, “**Dr**”).
 - c **Release** the mouse button.
 - The title you have chosen appears in the “**Title**” field.
 - The Titles in the drop-down box are **Dr**, **Mr**, **Ms**, and **Miss**.
 - The cursor moves to the “**First Name**” field.
- 4** Enter the user’s **first name**, then press **Tab**.
 - The cursor moves to the “**MI**” field.
- 5** Enter the user’s **middle initial**, then press **Tab**.
 - The cursor moves to the “**Last Name**” field.
- 6** Enter the user’s **last name**, then press **Tab**.
 - The cursor moves to the “**Email:**” field.
- 7** Enter the user’s **Email:** address, then press **Tab**.
 - The cursor moves to the “**User ID:**” field.
- 8** Enter the **User ID:** (in this case, **pascient**), and then press **Tab**.
 - The cursor moves to the “**Organization:**” field.
- 9** Enter the user’s **organization:**, and then press **Tab**.
 - The cursor moves to pull-down arrow next to the “**Affiliation:**” field.

- 10 Click on the pull-down arrow next to the “**Affiliation:**” field.
 - A pull-down menu appears with choices of **K-12, Commercial, Government, University,** and **Other.**
 - 11 Click on the choice **University.**
 - **University** appears in the “**Affiliation:**” field.
 - 12 Click on the “**User Verification Key:**” field.
 - The cursor moves to the “**User Verification Key:**” field.
 - 13 Enter the user’s **User Verification Key:**, then press **Tab.**
 - The cursor moves to the pull-down arrow next to the “**Home DAAC:**” field.
 - 14 Click on the pull-down arrow next to the “**Home DAAC:**” field.
 - A pull-down menu appears with choices of **ASF, CSN, EDC, GSF, JPL, LAR, MDC, MSF, NSC, ORN, RBD, SMC,** and **VTC.**
 - 15 Click on the choice **LAR.**
 - **LAR** appears in the “**Home DAAC:**” field.
 - 16 Click on the “**Project:**” field.
 - The cursor moves to the “**Project:**” field.
 - 17 Enter the **Project:** and then press **Tab.**
 - The cursor moves to the pull-down arrow next to the “**Primary Area of Study:**” field.
 - 18 Click on the pull-down arrow next to the “**Primary Area of Study**” field.
 - A pull-down menu appears with a number of choices.
 - 19 Click on the choice **Atmospheric Aerosols LaRC.**
 - The **Personal Information** folder is complete.
-

The next block of data to be entered is the shipping address. The shipping address is not necessarily the same as the mailing or billing addresses. Later, when shipping data, even though there is a shipping address registered, the User Services representative will need to confirm the shipping address with the user before shipment. If you have just entered the personal information, the “**Request Account**” folder is still open. To add the user’s shipping address, use the following procedure.

Create a User Account: Shipping Address

- 1 Click the “**Shipping Address**” folder tab.
 - The “**Shipping Address**” folder opens.
- 2 Click on the first “**Address:**” field.
- 3 Enter the user’s **Shipping Address**, then press **Tab**.
 - The cursor moves to the second “**Address:**” field.
- 4 If a second address field is needed to complete the user’s **Shipping Address**, enter the **Shipping Address**, then press **Tab**.
 - If a second address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the third “**Address:**” field.
- 5 If a third address field is needed to complete the user’s **Shipping Address**, enter the **Shipping Address**, then press **Tab**.
 - If a third address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the “**City:**” field.
- 6 Enter the **City:** to which the data will be shipped, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the “**State/Province:**” field.
- 7 Click on the pull-down arrow next to the “**State/Province:**” field.
 - A pull-down menu appears permitting choice among a list of states.
- 8 Click on the choice for the user’s **State** or **Province** for the shipping address, then press **Tab**.
 - The cursor moves to the “**Zip/Postal Code:**” field.
- 9 Enter the **Zip/Postal Code:** for the shipping address, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the “**Country:**” field.
- 10 Click on the pull-down arrow next to the “**Country:**” field.
 - A pull-down menu appears permitting choice among a list of countries.
- 11 Click on the choice for the **Country:** to which the data will be shipped, then press **Tab**.
 - The cursor moves to the “**Telephone:**” field.
- 12 Enter the **Telephone number** used at the shipping address, then press **Tab**.
 - The cursor moves to the “**Fax:**” field.

13 Enter the **Fax number** used at the shipping address, then press **Tab**.

- The “**Shipping Address**” folder is now complete.

The next block of data to be entered is the billing address. The billing address is not necessarily the same as the mailing or shipping addresses. The User Services representative is responsible for maintaining up-to-date billing addresses. If you have just entered the shipping address, the “**Request Account**” folder is still open. To add the user’s billing address, use the following procedure.

Create a User Account: Billing Address

1 Click the “**Billing Address**” folder tab.

- The “**Billing Address**” folder opens.

2 Click on the first “**Address:**” field.

3 Enter the user’s **Billing Address**, then press **Tab**.

- The cursor moves to the second “**Address:**” field.

4 If a second address field is needed to complete the user’s **Billing Address**, enter the **Billing Address**, then press **Tab**.

- If a second address field is not needed, press **Tab** to bypass the field.
- The cursor moves to the third “**Address:**” field.

5 If a third address field is needed to complete the user’s **Billing Address**, enter the **Billing Address**, then press **Tab**.

- If a third address field is not needed, press **Tab** to bypass the field.
- The cursor moves to the “**City:**” field.

6 Enter the **City:** to which the payment due billings will be sent, then press **Tab**.

- The cursor moves to the pull-down arrow next to the “**State/Province:**” field.

7 Click on the pull-down arrow next to the “**State/Province:**” field.

- A pull-down menu appears permitting choice among a list of states.

8 Click on the choice for the user’s **State** or **Province** for the billing address, then press **Tab**.

- The cursor moves to the “**Zip/Postal Code:**” field.

- 9 Enter the **Zip/Postal Code:** for the billing address, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the “**Country:**” field.
 - 10 Click on the pull-down arrow next to the “**Country:**” field.
 - A pull-down menu appears permitting choice among a list of countries.
 - 11 Click on the choice for the **Country:** to which the payment due billings will be sent, then press **Tab**.
 - The cursor moves to the “**Telephone:**” field.
 - 12 Enter the **Telephone number** used at the billing address, then press **Tab**.
 - The cursor moves to the “**Fax:**” field.
 - 13 Enter the **Fax number** used at the billing address, then press **Tab**.
 - The “**Billing Address**” folder is now complete.
-

The next block of data to be entered is the mailing address. The mailing address is not necessarily the same as the billing or shipping addresses. The User Services representative is responsible for maintaining up-to-date mailing addresses. If you have just entered the billing address, the “**Request Account**” folder is still open. To add the user’s mailing address, use the following procedure.

Create a User Account: Mailing Address

- 1 Click the “**Mailing Address**” folder tab.
 - The “**Mailing Address**” folder opens.
- 2 Click on the first “**Address:**” field.
- 3 Enter the user’s **mailing address**, then press **Tab**.
 - The cursor moves to the second “**Address:**” field.
- 4 If a second address field is needed to complete the user’s **mailing address**, enter the **mailing address**, then press **Tab**.
 - If a second address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the third “**Address:**” field.

- 5 If a third address field is needed to complete the user's **Mailing Address**, enter the **Mailing Address**, then press **Tab**.
 - If a third address field is not needed, press **Tab** to bypass the field.
 - The cursor moves to the "**City:**" field.
 - 6 Enter the **City:** to which regular correspondence is sent, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the "**State/Province:**" field.
 - 7 Click on the pull-down arrow next to the "**State/Province:**" field.
 - A pull-down menu appears permitting choice among a list of states.
 - 8 Click on the choice for the user's **State** or **Province** for the **mailing address**, then press **Tab**.
 - The cursor moves to the "**Zip/Postal Code:**" field.
 - 9 Enter the **Zip/Postal Code:** for the mailing address, then press **Tab**.
 - The cursor moves to the pull-down arrow next to the "**Country:**" field.
 - 10 Click on the pull-down arrow next to the "**Country:**" field.
 - A pull-down menu appears permitting choice among a list of countries.
 - 11 Click on the choice for the **Country:** for the **mailing address**, then press **Tab**.
 - The cursor moves to the "**Telephone:**" field.
 - 12 Enter the **Telephone number** used at the mailing address, then press **Tab**.
 - The cursor moves to the "**Fax:**" field.
 - 13 Enter the **Fax number** used at the mailing address, then press **Tab**.
 - The "**Mailing Address**" folder is now complete.
-

Once the five folders are complete, the next step is to return to the Account Information tab and assign a V0 Gateway User Type and Password. The creation of the new account is achieved with a click on the **Create Account** button at the bottom of the Request Account screen. This action logs the account into the database as a new account. It also results in automatic dispatch of an e-mail message to the user's e-mail address with notification that the account has been created. The User Services representative will complete the account registration process by providing the user with the initial ECS account password. The password dissemination is done in accordance with local DAAC policy. To create an account using the data registered for Dr. Phyllis Scientist, use the following procedure.

Create a User Account

- 1 Click the “**Account Information**” folder.
 - The “**Account Information**” folder opens.
 - 2 Click on the pull-down arrow next to the “**V0 Gateway User Type**” field.
 - A pull-down menu appears with choices of **DAACOPS**, **ECSDEV**, **V0CERES**, and **GUEST**.
 - 3 Click on the choice **GUEST**.
 - **GUEST** appears in the “**V0 Gateway User Type**” field.
 - 4 Click on the “**V0 Gateway Password**” field.
 - The cursor moves to the “**V0 Gateway Password**” field.
 - 5 Enter *V0Passwd*.
 - The Account Information is complete.
 - 6 When the information is complete, click the “**Create Account**” button.
 - The account is created; the account and its information is now available in the approved list on the **Profile Account** folder.
-

Adding Privileges to an Account Created from Universal Resource Locator (URL) Registration

As described previously, users may enter registration data using a registration page accessed through the EOS Data Gateway on the WWW. When a user enters registration data this way, it creates a basic ECS account for that user in the system database. If the user needs special privileges (e.g., access to restricted granules, permission to submit an ASTER Data Acquisition Request, permission to use the On-Demand Form Request Manager to order certain ASTER data), the User Services representative uses ECS User Account Management tool at the SMC to grant the needed authorization. Figure 9 shows the **DAR Information** folder on the **Profile Account** tab, illustrating the **Aster Category** pull-down list used to select privileges for submitting ASTER Data Acquisition Requests.

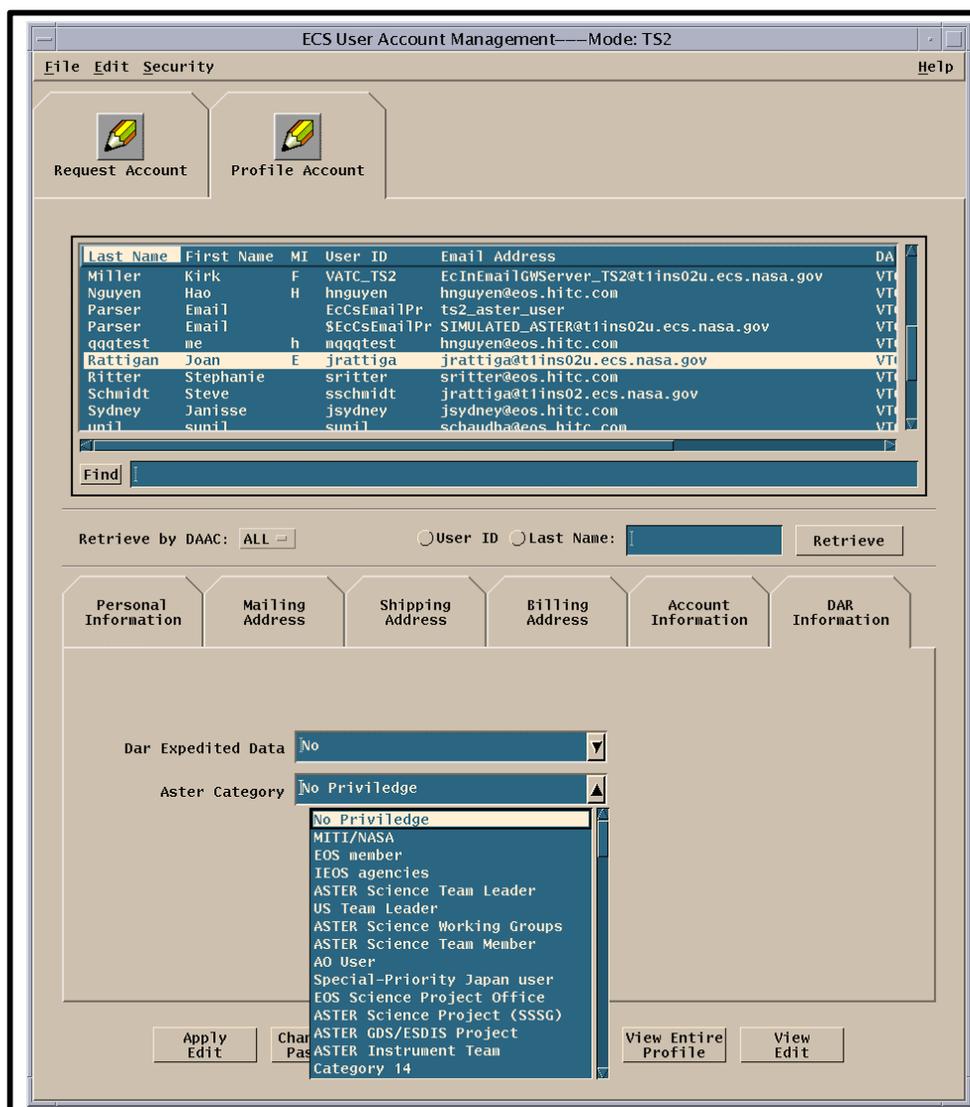


Figure 9. DAR Information folder, with Aster Category list

Let's examine how you can use the ECS Account Management tool to search the database for a specific account and authorize special privileges. Suppose a scientist named Dr. Paul W. Fingerman has registered through the EDG web site registration and has requested authorization as an ASTER Science Team member to submit Data Acquisition Requests using the ASTER DAR Tool. Use the following procedure.

Adding Privileges to an Account Created from URL Registration

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
- 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: “**Request Account,**” and “**Profile Account.**”
- 3 Click the “**Profile Account**” folder tab.
 - Folders and fields applicable to existing accounts are displayed.
- 4 Click on the **Retrieve by DAAC:** option button and select **ALL**.
 - The button displays the word **ALL**.
- 5 Click on the **Last Name** radio button and type the user's last name (in this case, **Fingerman**) in the text entry field.
 - The button indicates its selection and the typed entry is displayed in the text entry field.
- 6 Click on the **Retrieve** button.
 - The account list displays information for users whose last name is the same as that entered in the previous step.
- 7 Scroll through the accounts listed until the desired account (for **Paul Fingerman**) is **highlighted**, then double click.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information.**
- 8 Click the “**DAR Information**” folder.
 - The “DAR Information” folder opens.
 - The displayed fields indicate no Aster privileges.
- 9 Click on the pull-down arrow to the right of the **Aster Category** field and select **ASTER Science Team Member** from the displayed pull-down list.
 - The Aster Category field displays ASTER Science Team Member.

10 Click the “**Apply Edit**” button to implement the change to the “**DAR Information**” folder.

Editing/Modifying an Existing Account

User Services representatives are responsible for maintaining ECS User Accounts. This means keeping in close contact with the user to ensure the continued accuracy of account information in the database. If an address change notice is received, unless it is very specific, it is necessary to contact the user to verify its applicability. Remember, there are three addresses in the user account information, and they need not be the same. If they are the same and you receive an address change notification, you can not assume it applies to all three addresses. Verify changes in address, account information, or personal information by contacting the user. Make verified changes using the Profile Account folder of the ECS User Account Management tool.

The procedures for editing account information are similar for any of the address or other information folders. Let’s examine how it works for a couple of changes. Assume you have received a request from Dr. Phyllis A. Scientist to change her shipping address. Because her university has instituted a requirement for all shipped materials to go through a central receiving point, ECS should no longer send data to the Department of Chemical Engineering. She requests a change in shipping address from the old one:

Department of Chemical Engineering
Hampton University
Hampton, VA 23668

to a new one:

Receiving (Code CE)
Hampton University
Hampton, VA 23668

To make the change, use the following procedure.

Edit/Modify an Existing Account: Shipping Address

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
- 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: “**Request Account,**” and “**Profile Account.**”
- 3 Click the “**Profile Account**” folder tab.
 - Folders and fields applicable to existing accounts are displayed.

- 4 Retrieve the user's profile information by entering the search criteria (in this case, **Scientist**) in the "**Find**" field and then pressing **Return**.
 - The "**Find**" field is located to the right of the **Find** button.
 - Enter the user's **Last Name**, **E-mail address**, or **User ID** to create the search.
 - The scroll box displays a list of accounts that match the search criteria.
 - 5 Scroll through the accounts listed until the desired account (for **Phyllis Scientist**) is **highlighted**, then double click.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.
 - 6 Click the "**Shipping Address**" folder.
 - The "Shipping Address" folder opens.
 - The cursor moves to the first "Address" field.
 - 7 Enter the user's new **Shipping Address** (in this case **Receiving (Code CE)**, then press **Tab**.
 - The cursor moves to the second "**Address**" field.
 - Because this completes the edit for the only part of the address that changed, there is no need to make any additional changes in this folder.
 - 8 Click the "**Apply Edit**" button to implement the change to the "**Shipping Address**" folder.
-

Other changes to the shipping address, or changes to the billing address or mailing address are made in the same way. The process is similar for changes to account information or personal information. For example, suppose Dr. Scientist sends you an e-mail noting that an office change has resulted in a change to her telephone number; the new number is 804-727-5541. To make the change, use the following procedure.

Edit/Modify an Existing Account: Account Information

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
- 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: "**Request Account**," and "**Profile Account**."

- 3 Click the “**Profile Account**” folder tab.
 - Folders and fields applicable to existing accounts are displayed.
 - 4 Retrieve the user’s profile information by entering the search criteria (in this case, **Scientist**) in the “**Find**” field and then pressing **Return**.
 - The “**Find**” field is located to the right of the **Find** button.
 - Enter the user’s **Last Name**, **E-mail address**, or **User ID** to create the search.
 - The scroll box displays a list of accounts which match the search criteria.
 - 5 Scroll through the accounts listed until the desired account (for **Phyllis Scientist**) is **high-lighted**, then double click.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information**, **Personal Information**, **Shipping Address**, **Billing Address**, **Mailing Address**, and **DAR Information**.
 - 6 Click the “**Personal Information**” folder.
 - The “**Personal Information**” folder is displayed.
 - 7 Click the “**Telephone**” field.
 - The cursor moves to the “**Telephone**” field.
 - 8 Enter the new **telephone number**, then press **Tab**.
 - All changes for this folder have been completed.
 - 9 Click the “**Apply Edits**” button to implement the change to the “**Personal Information**” folder.
-

Deleting an ECS Account

The User Services representative may be instructed by management, or may be requested by the user, to delete an ECS user account from the database. If you are requested to delete an account, you use the ECS User Account Management tool to retrieve and verify the account, and then proceed to remove it from the database. As an example to see how this is accomplished, suppose you receive a request from Dr. Phyllis A. Scientist, who is leaving Hampton University to take a new job as a research chemist for a private company, to delete her account. Use the following procedure to remove the account from the database.

Delete an ECS Account

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
 - 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: “**Request Account,**” and “**Profile Account.**”
 - 3 Click the “**Profile Account**” folder tab.
 - Folders and fields applicable to existing accounts are displayed.
 - 4 Retrieve the user’s profile information by entering the search criteria (in this case, **Scientist**) in the “**Find**” field and then pressing **Return**.
 - The “**Find**” field is located to the right of the **Find** button.
 - Enter the user’s **Last Name, E-mail address,** or **User ID** to create the search.
 - The scroll box displays a list of accounts that match the search criteria.
 - 5 Scroll through the accounts listed until the desired account (for **Phyllis Scientist**) is **highlighted**, then double click.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address,** and **DAR Information.**
 - 6 Click the “**Personal Information**” folder.
 - The “Personal Information” folder opens.
 - View the folder to validate the account scheduled for deletion.
 - 7 Click the “**Delete Account**” button.
 - The account is deleted.
-

Canceling an ECS Account

The User Services representative may cancel an ECS user account, which differs from deleting the account because it does not immediately remove the account from the database. It merely imposes a temporary probation period for the user's privileges, for an appropriate cause, such as failure to satisfy a payment due for services previously provided, or some other abuse of privileges. The process involves establishing an expiration date, upon which the account will be deleted from the database unless the cause of sanction is removed. If it becomes necessary to cancel an account, you use the ECS User Account Management tool to retrieve and verify the account, and then proceed with the cancellation/sanction. As an example, suppose you need to cancel the account for Dr. Paul W. Fingerman; give him one month to remove the cause of the sanction. Use the following procedure.

Cancel an ECS Account

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
- 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: **“Request Account,”** and **“Profile Account.”**
- 3 Click the **“Profile Account”** folder tab.
 - Folders and fields applicable to existing accounts are displayed.
- 4 Retrieve the user's profile information by entering the search criteria (in this case, **Fingerman**) in the **“Find”** field and then pressing **Return**.
 - The **“Find”** field is located to the right of the **Find** button.
 - Enter the user's **Last Name, E-mail address,** or **User ID** to create the search.
 - The scroll box displays a list of accounts which match the search criteria.
- 5 Scroll through the accounts listed until the desired account (for **Paul Fingerman**) is **highlighted**, then **double click**.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address,** and **DAR Information.**
- 6 Click the **“Personal Information”** folder tab.
 - The **“Personal Information”** folder opens.
 - View the folder to validate the account scheduled for cancellation.
- 7 Click the **“Account Information”** folder tab.
 - The **“Account Information”** folder opens.

- 8 Click the “Expiration Date” field.
 - The cursor moves to the “**Expiration Date**” field.
 - 9 Enter the **Expiration Date** (in this case, one month from the current date), then press **Tab**.
 - When the expiration date is reached, the system automatically deletes the account from the system.
 - 10 Click the **Apply Edit** button.
 - An expiration date is established for the privileges on this account.
 - The sanction on the account privileges can be rescinded at any time up until the expiration date has been reached.
 - The sanction can be rescinded by removing the expiration date.
-

To complete the cancellation action, send the errant user an e-mail or letter with notification of the temporary sanction and the fact that the account will be deleted if the issue is not resolved by the specified date (the expiration date you established in canceling the account). Assume that Dr. Fingerman takes action to resolve the issue. To reinstate his account, use the following procedure.

Cancel an ECS Account: Reinstatement

- 1 Click the **Expiration Date** field.
 - The cursor moves to the **Expiration Date** field.
 - 2 Enter the **Expiration Date** (in this case, press the **Delete** key to remove the date, or use the mouse to **highlight** the date and press the **delete** key), then press **Tab**.
 - The expiration date is removed.
 - 3 Click the **Apply Edits** button to implement the change to the **Account Information** folder.
-

Troubleshooting Account Management Problems

Troubleshooting is a process of identifying the source of problems on the basis of observed trouble symptoms. The User Account Management tool is part of the ECS System Management Support Subsystem (MSS), and uses database functions in that subsystem. If the tool cannot be launched, or does not function (e.g., cannot retrieve accounts), you will need to ask the System Administrator to ensure that the User Registration/User Profile Server is functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the GUI while it is apparently functioning normally. Error messages associated with the User Account Management tool are listed in Appendix A of the *Operations Tools Manual* (Document 609-CD-610-003, Table A.2.6-1). Table 1 is adapted from the corresponding table in Document 609. If a problem cannot be identified and fixed without help within a reasonable period of time, the appropriate response is to call the help desk or submit a trouble ticket in accordance with site Problem Management policy.

Table 1. User Account Management Tool User Messages

Message Text	Impact	Cause/Corrective Action
Can Not Connect To The Server. Try again later.	Unable to retrieve a user request or user profile.	Notify the System Administrator that the User Profile Server needs to be started.
No data found in the database.	No user requests or registered users are entered in the database for the selected home DAAC.	None.
The V0GW password and Gate Way User Type can not be Empty.	Cannot complete action to create a user profile.	Ensure that all required fields have data entered.
Create Register User Failed Please check log file for error.	Cannot complete action to create a user profile.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.

Table 1. User Account Management Tool User Messages (Cont.)

Message Text	Impact	Cause/Corrective Action
Delete request user failed.	Unable to delete a user request.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
Update Failed for Register User Please try again.	Unable to update a user request.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
The First Name, Last Name, Telephone number and Email Address can not be Empty.	Cannot complete action to create a user profile.	Ensure that all required fields have data entered.
Insert has failed for Regist User, Please try again.	Cannot complete action to create a user profile.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
Delete failed for Register User Please try again.	Unable to delete a user request.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
Update failed for profile database Please try again.	Unable to update a user profile.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
V0 GateWay password is empty. The password is not updated.	Unable to update V0 Gateway password.	Add entry in the appropriate field.
V0 GateWay password Failed. Please try again.	Unable to change V0 Gateway password.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
Delete failed for profile database Please try again.	Unable to delete user profile.	Check User Profile Server log files for possible Sybase errors; notify Database Administrator of problem.
No e-mail address.	Unable to change Aster category or delete a DAR privilege.	Add e-mail address in the configuration file.

Checking Account Management Server Log Files

Log files can often provide information that will identify possible sources of disruption in Account Management server function or communications, suggesting additional checks or actions that may help resolve the problem. The procedure for checking a log file starts with the assumption that the operator has logged in to ECS.

Checking Account Management Server Log Files

- 1 To log in to the host for the server and log(s) to be examined, type `/tools/bin/ssh <hostname>` and then press the **Return/Enter** key.
 - For `<hostname>`, use `<x>0mss21`, where `<x>` = **e** for EDC, **g** for GSFC, **l** for LaRC, or **n** for NSIDC.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key ‘<user@localhost>’** appears; continue with Step 2.
 - If you have not previously set up a secure shell passphrase; go to Step 3.
- 2 If a prompt to **Enter passphrase for RSA key ‘<user@localhost>’** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 4.
 - The prompt reflects the login to the selected host.
- 3 At the `<user@remotehost>`’s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - The prompt reflects the login to the selected host.
- 4 Type `cd /usr/ecs/<MODE>/CUSTOM/logs` and then press the **Return/Enter** key.
 - The prompt reflects the change to directory `/usr/ecs/<MODE>/CUSTOM/logs`.
- 5 To view a server log, type `pg filename` and then press the **Return/Enter** key.
 - *filename* refers to the account management log file to be reviewed (e.g., **EcMsAcRegUserSrvr.ALOG**, **EcMsAcRegUserSrvrDebug.log**).
 - The first page of the log file is displayed; additional sequential pages can be displayed by pressing the **Return/Enter** key at the `:` prompt.
 - Although this procedure has been written for the `pg` command, any UNIX editor or visualizing command (e.g., **vi**, **more**, **tail**) can be used to review the log file.
 - Typically, the `<server>Debug.log` captures more detailed information than the `<server>.ALOG`. However, for some servers (e.g., **SDSRV**), there may be significant detail in the `<server>.ALOG`. It is also important to note that the **DebugLevel**

setting in the `<server>.CFG` file determines the level of detail captured in the `<server>Debug.log` (**0** is off, a setting of **1** captures status and errors, a setting of **2** captures major events, and a setting of **3** is a full trace recording of all activity). If the **DebugLevel** has been set to one of the lower levels during operations, the System Administrator may set it to **3** during troubleshooting.

- 6** Review the log file(s) to determine if there are any indications of connection problems or errors at start up.
 - The **EcMsAcRegUserSrvrDebug.log** file for the User Profile/User Registration server may contain an error message concerning **PF Init** or some connection error or problem (notify the System Administrator).
 - The **EcMsAcRegUserSrvr.ALOG** file may contain evidence of a Sybase error (e.g., **SybaseErrorCode1 =92014;SybaseErrorMessage1 ="x0mss21_srvr"** or **SybaseErrorCode2 =16;SybaseErrorMessage2 =""**) (notify the Database Administrator).
 - 7** To exit the **pg** review of the log file, type **q** at the **:** prompt and then press the **Return/Enter** key.
-

Processing an Order

Some users may prefer not to use the Search and Order tool directly. It has been estimated that there may be several orders placed by telephone every day. In those instances, the User Services representative enters the order data for the user. As part of the process, the representative uses several tools:

- User Contact Log tool (Remedy, the Trouble Ticket tool).
 - create and update a user contact log record.
- ECS User Account Management tool.
 - retrieve and verify user account.
- Search and Order tool.
 - locate and order the data requested by the user.

Create a User Contact Log Record

Any User Services event (user contact for any reason) is a cue for the User Services representative to create a record in the User Contact Log. Each record is assigned a unique Log ID, which can be used later to retrieve the record for review or updating with new information. The record contains other information about the user, referred to as the “contact,” such as name, telephone number, e-mail address, home DAAC, and organization. It also documents the means of contact, the name of the person who received the contact, and the time of the contact, as well as descriptions of the reason for it.

The User Contact Log is a customized application of the Remedy commercial software package. The application is launched from the Remedy initial screen with a menu or button action. The contact log entries may then be saved, searched, retrieved, and modified. The capability to modify existing records permits tracking and updating information related to a user contact that has follow-up actions until it is closed.

Figure 10 shows the User Contact Log Entry screen.

Remedy User – ReIB–Contact Log (New)

File Edit View Tools Actions Window Help

New ReIB–Contact Log Save

Log–id [] Log Status Logged Contact Method Telephone Associated TT Id []

Short Description Dr. Phil O'Dendron requested order status

Long Description Dr. Phil O'Dendron called and spoke with Hugh Surcervices to check on an FTP pull order for MOD01 data placed 05/05/2002. Order ID is 000000357. He expressed concern that the order might be delayed.

Comment Log Told him the requested data had not been produced because of backlog from data provider.

Contact Id (Required for TT) []

Receiving Operator nsurcerv@daac.ecs.gov

Category Concern

Contact Name Phil O'Dendron

Contact Phone 301 925-1110

Contact E-mail podendra@enormoussu.edu

Contact Home DAAC GSF

Contact Organization Enormous State University

Received Time 05/16/02 13:12:56

Entered Time []

Modified–date []

Last–modified–by []

Create TT Goto TT

cmshared t1mss06

Figure 10. User Contact Log Entry Screen

Suppose you receive a request for data from Dr. Paul W. Fingerman, who prefers to have you locate and order it for him. The data you will need to create a User Contact Log record are:

Contact Method: Fax.
Short Description: Search/order MODIS Surface Temperature/Emissivity Data.
Long Description: Search/order data: Parameter Land Surface Temperature, Platform Terra, Sensor MODIS, Data Set MODIS/TERRA Land Surface Temperature/Emissivity 5 min L2 Swath 1km V001, Data Center GSFC, Start/Stop 06 Jun 2000/31 Aug 2000, Search Region 40 DEG to 70 DEG LATITUDE, -100 DEG to -65 DEG LONGITUDE.
Contact Name: Paul W. Fingerman.
Contact Phone: 301-925-0502.
Contact E-Mail: pfingerm@eos.hitc.com.
Contact Home DAAC: GSFC.
Contact Organization: ECS.
Category: Data Request.

Use the following procedure to create a User Contact Log record for the data request.

Create a User Contact Log Record

- 1 Access the command shell
 - The command shell prompt is displayed.
- 2 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 3 Start the log-in to the MSS client server by typing **/tools/bin/ssh *hostname*** (*e.g.*, e0mss21, g0mss21, l0mss21, n0mss21) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '*user@localhost*'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase; go to Step 5.

- 4 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 6.
- 5 At the *<user@remotehost>'s password:* prompt, type your *Password* and then press the **Return/Enter** key.
- 6 To change to the directory containing the Remedy application, type **cd /path** and then press the **Return/Enter** key.
 - For *path*, use **/usr/ecs/OPS/COTS/remedy/bin**.
- 7 Type **aruser &** to launch Remedy.
 - A Remedy Action Request System logo window is displayed briefly, followed by a Remedy initial screen from which a number of ECS application forms, including the User Contact Log, may be launched.
- 8 Follow menu path **File→Open** or click on the leftmost button near the top of the window.
 - The **Open** dialog box is displayed, showing choices including: **RelB-Contact Log**, **RelB-TT-ForwardToSite**, **RelB-TroubleTickets**, and **TroubleTicket-Xfer**.
- 9 Click on **RelB-Contact Log** to highlight it and then click on the **New** button.
 - The **New RelB Contact Log** window is displayed.
- 10 Click on the “Contact Method” field.
- 11 Enter the **Contact Method** (optional).
 - A drop-down menu may also be used:
 - a Point the mouse on the arrow to the right of the **Contact Method** field.
 - b While holding the mouse pointer button down, **highlight** the **Contact Method** you require (in this case, “**Fax**”).
 - c **Release** the mouse button.
 - The highlighted affiliation appears in the “**Contact Method**” field.
 - The Titles in the drop-down box are “**Phone**,” “**E-mail**,” “**Fax**,” “**US Mail**,” and “**Walk-in**.”

12 Click on the **Short Description** field.

- The **Short Description** field is 128 characters long.
- Queries that may later be used to locate existing User Contact Log records will search information in the **Short Description** field. Therefore, when you enter a short description, enter it with “search criteria” in mind.

13 Enter the **Short Description** (required).

14 Click on the **Set Received Time** button (optional).

- The current time is displayed in the **Received Time** field.

15 Click on the **Long Description** field.

- The **Long Description** field is used when the description requires more detail than the **Short Description** field will allow.
- The **Long Description** field is often used when a problem exists: it can help with the resolution of Trouble Tickets.

16 Enter a **Long Description** if needed (optional).

17 Click on the **Contact Id** field.

18 Enter the **Id** (User ID) of the person who contacted User Services.

- The **Contact Id** is not required unless a Trouble Ticket is being created from the User Contact Log.

19 If a **Contact Id** was entered at **Step 18**, click the **Set Contact Information** button and then go to **Step 30**; otherwise, move to **Step 20**.

- The system will automatically complete the **Contact Name**, **Contact Phone**, **Contact E-mail**, **Contact Home DAAC**, and **Contact Organization** fields, if the **Contact Id** has been entered.
- If the contact is not a registered Remedy user, the contact fields must be manually completed.

- 20 If the contact information was not automatically entered at **Step 19**, click on **Contact Name**.
 - 21 Enter the **Contact's Name** (optional).
 - 22 Click on the **Contact Phone** field.
 - 23 Enter the **Contact's Phone** number (optional).
 - 24 Click on the **Contact E-mail** field.
 - 25 Enter the **Contact's E-mail address** (optional).
 - 26 Click on the **Contact Home DAAC** field.
 - 27 Enter the **Contact's Home DAAC** (optional).
 - 28 Click on the **Contact Organization** field.
 - 29 Enter the **Contact's Organization** (optional).
 - 30 When all contact information has been entered, click on the **Receiving Operator** field.
 - 31 In the **Receiving Operator** field, enter the name of the operator (User Services Representative) who is creating the User Contact Log record.
 - 32 Click on the **Category** field.
 - 33 Enter the **Category**.
 - A drop-down menu may also be used:
 - a Point the mouse on the arrow to the right of the **Category** field.
 - b While holding the mouse pointer button down, **highlight** the **Category** you require (in this case, **Order**).
 - c **Release** the mouse button.
 - The highlighted category appears in the **Category** field.
 - The Titles in the drop-down box are **Suggestion, Complaint, Concern, Order, and Subscription**.
 - 34 Click the **Save** button near the upper right corner of the window (or follow menu path **Actions**→**Save**).
 - The User Contact Log record is created and submitted to the database.
 - A unique Id is generated for the record and entered into the **Log Id** field.
 - A message **Submit successful: ID=<site><nnn . . .>** to indicate the submission and provide the record ID number.
-

Verifying an Account with the User Profile Screen

As you have seen, part of responding to a user request for assistance in ordering data is creation of a User Contact Log record. You also remember from our discussion of account management that verifying the user's account is part of responding to user's requests.

- Display or edit a user's account and personal information: ECS User Account Management Tool, Profile Account.
- Quick Summary: ECS User Account Management Tool, User Profile (display only).

Figure 11 shows the User Profile Screen.

The User Profile screen is accessible only through the SMC Account Management Tool, because the button that launches the display is not available on the DAAC Account Management Tool.

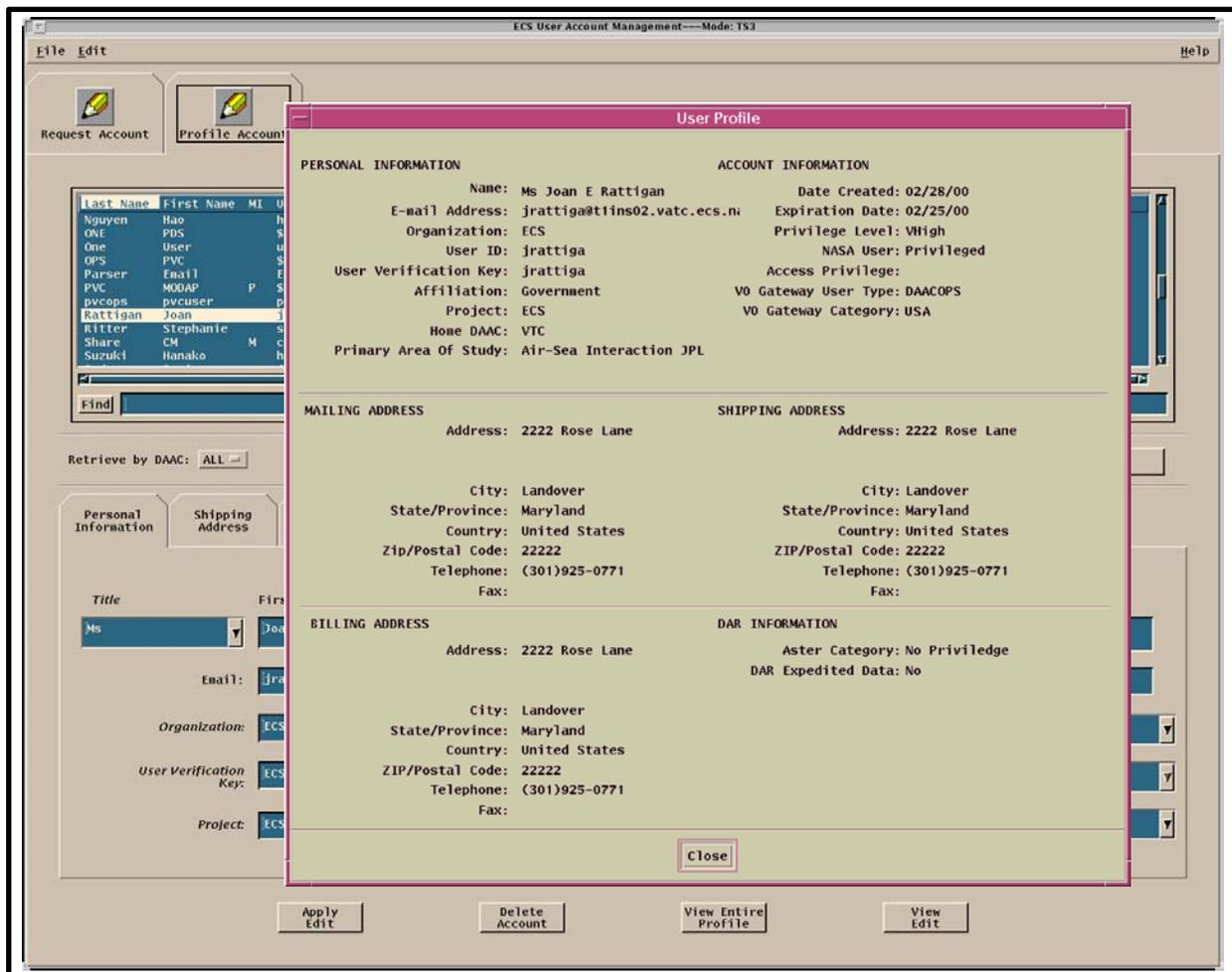


Figure 11. User Profile Screen

To verify the user profile for Paul Fingerman, use the following procedure.

Retrieve User Account/Validate a User

- 1 Use secure shell to perform a remote log in to the Account Management host at the SMC.
 - 2 Launch the **ECS User Account Management** application GUIs.
 - The **ECS User Account Management** window is displayed.
 - The window shows two folders: “**Request Account,**” and “**Profile Account.**”
 - 3 Click the **Profile Account** folder tab.
 - Folders and fields applicable to existing accounts are displayed.
 - 4 Retrieve the user’s profile information by entering a search criterion (in this case, enter **Fingerman**) in the **Find** field and then pressing **Return**.
 - The **Find** field is located to the right of the **Find** button.
 - The scroll box displays a list of accounts that match the search criteria.
 - You can create a search by entering the user’s **Last Name, E-mail address, or user ID.**
 - 5 Scroll through the accounts listed until the desired account (for **Paul Fingerman**) is **highlighted**, then **double click**.
 - Six folders are displayed that contain detailed information about the selected account: **Account Information, Personal Information, Shipping Address, Billing Address, Mailing Address, and DAR Information.**
 - 6 Click on the “**View Entire Profile**” option button at the bottom of the screen.
 - The User Profile screen is displayed.
 - This is a read only screen; no changes can be made without going to each individual folder.
 - The User Profile screen displays the information contained in the **Personal Information** folder, **Account Information** folder, **Shipping Address** folder, **Billing Address** folder, **Mailing Address** folder, and the **DAR Information** folder.
 - 7 After examining the displayed information to verify the user’s account, **click** the **Close** button to exit from the User Profile screen.
-

Data Search and Order

Having created a User Contact Log record documenting receipt of a data request and verified the user account, the User Services representative can proceed to searching for the requested data and placing the order. The Search and Order Tool is the EOS Data Gateway (EDG) Web Client.

- Guidance for user (User Manual for EOS Data Gateway) available on the WWW at the following URL: <http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/>.
 - User Support links and News: technical information.
 - Frequently Asked Questions (FAQ): captures commonly sought information on terminology, search, data, and ordering with the EOS Data Gateway.
 - Tutorial: introduction to the tool and how to find and order data.
- Several approaches are available to the user.
 - Web-based Search and Order tool, for quick data access using simple search criteria; also allows easy downloading of pre-selected popular data and images; available at location <http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome/>.
 - Data center-specific searches; if user knows where the desired data are stored, the specific center may have a specialized tool for ordering data.
 - User Services Representative assistance; the user may elect to have you do the search instead of personally accessing one of the available tools; you will use the EDG Web Client Search and Order Tool.

Figure 12 shows the initial screen from the Search and Order Tool.

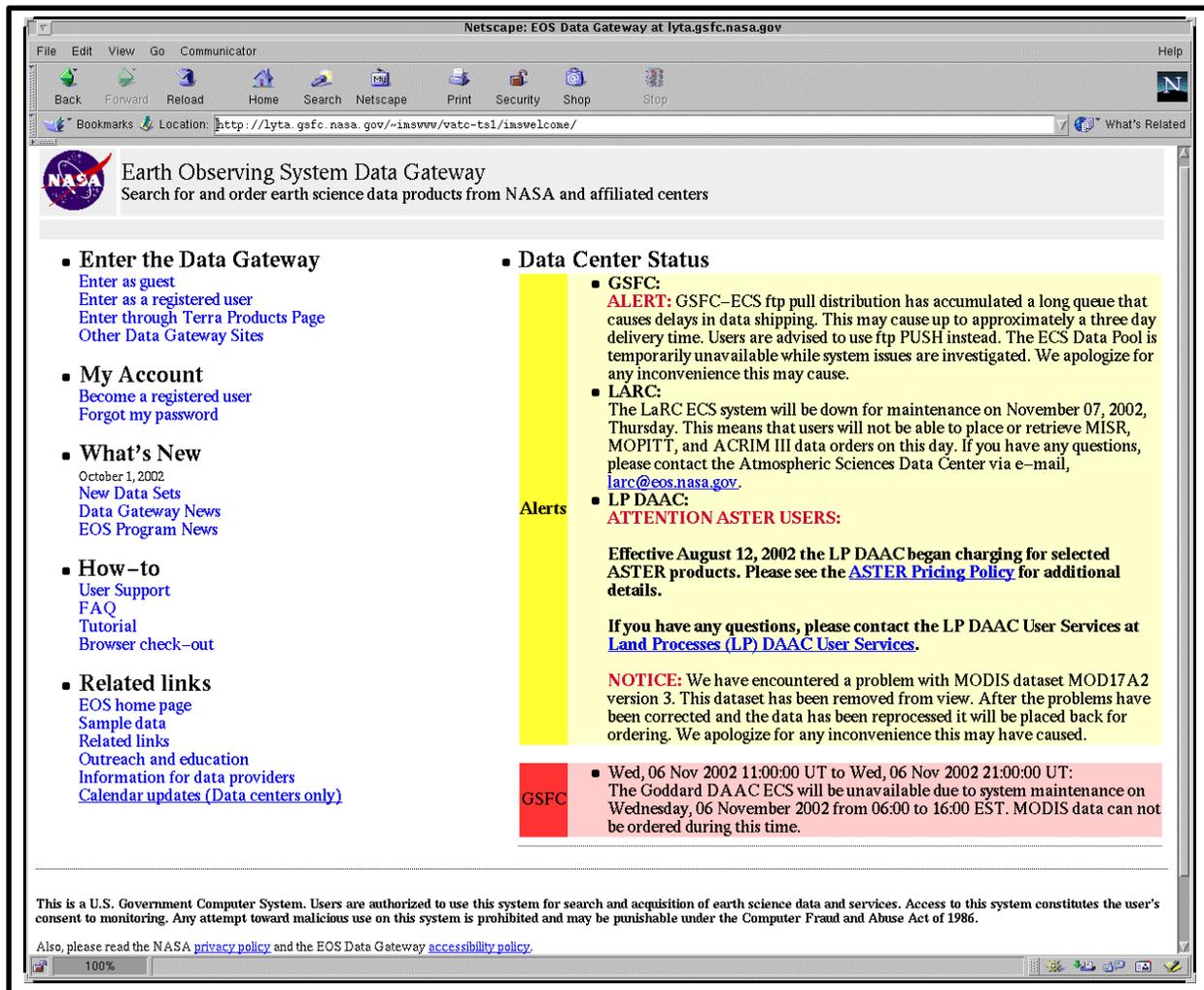


Figure 12. Welcome Screen for Search and Order Tool

The page illustrated in Figure 12 permits the user to enter a search as a guest, or, if registered, to enter as a registered user. The page also permits an unregistered user to gain access to the web-based user registration capability, and to access other information about the EDG tool and EOS programs.

From the initial screen, entry as a guest or entry and login as a registered user provides access to search pages. Figure 13 shows the primary data search page. This page permits a user to identify data sets available at EOS data centers as a first step in the data search and order process. Additional areas on the screen permit the user to add more details to narrow the search (e.g., specify a parameter for search, define a geographic area, define a date and time range).

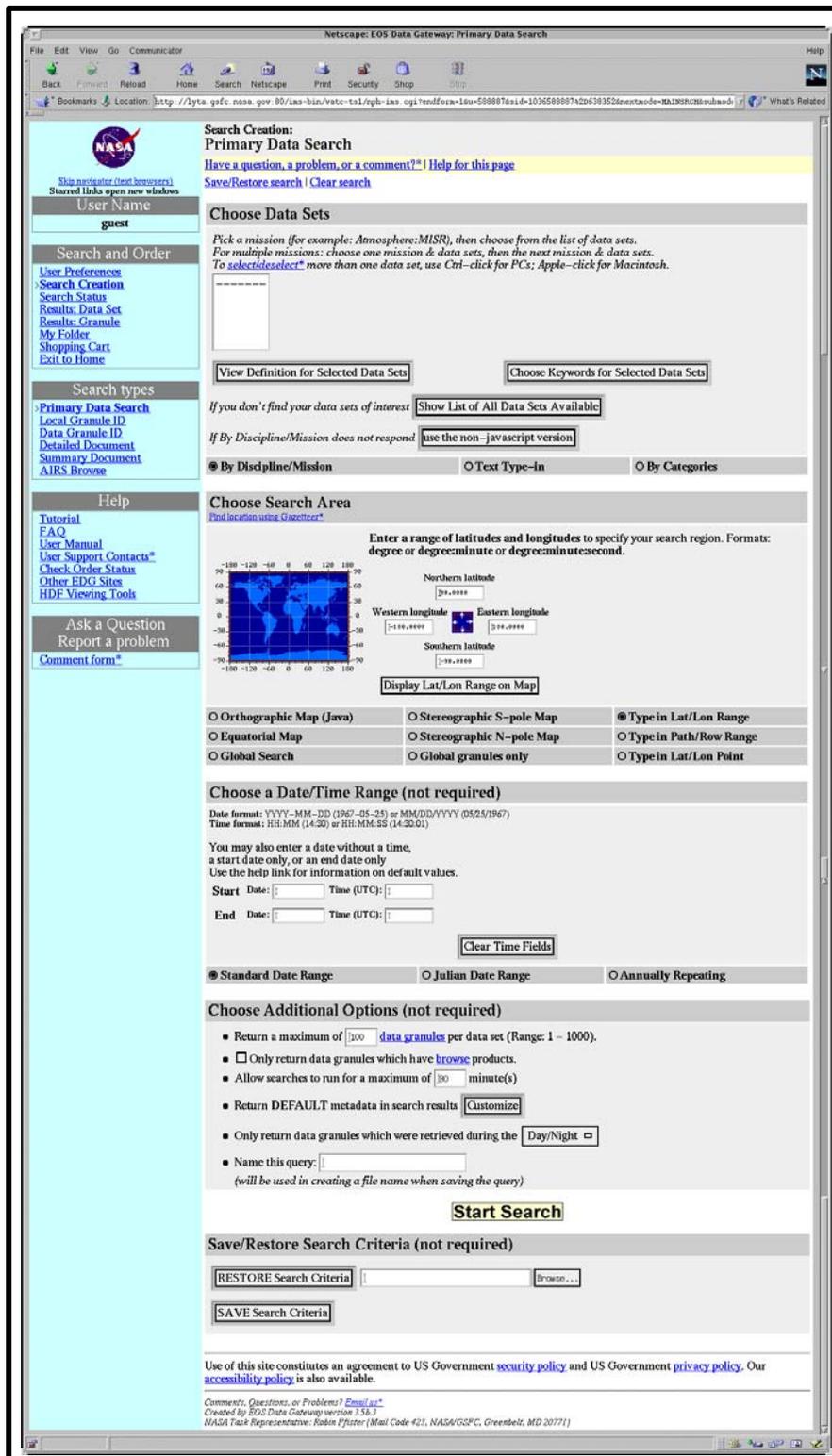


Figure 13. Search and Order Tool, Primary Data Search Page

The page illustrated in Figure 13 reflect the basic layout of Search and Order Tool screens:

- NASA logo in upper-left corner.
- Navigation links on the left, below the NASA logo.
- Page title at top of right-hand frame.
- Message area immediately below the page title.
- Page body displaying the main contents of the page.
- Signature and contact data at the bottom of the page.

From the search form shown in Figure 13, the user may be transferred to additional pages to specify various parameters or search constraints. For example, to specify a data set, the user can begin by selecting an option to choose keywords for selected data sets, which accesses additional pages. As another example, in specifying geographic location, the user may select an option to type in a range of latitude and longitude, but if the user prefers to select an area using a map, selection of that option will access a page to specify the geographic region on a map display. After using one of the additional pages for further defining the search, the user is returned to the form showing the search refinements selected.

After completing the search specifications, the user submits the search. The search may take several minutes, during which the user is provided feedback showing that the search is in progress, as illustrated in Figure 14. In fact, if the search takes too long, some data centers have established a "wall," or maximum estimated time, beyond which the search will not run. In this case, the user is provided a message requesting that the search criteria be narrowed, until the search is broken down into parts of manageable sizes.

The system design incorporates *results set chunking*, a capability to provide search results in parts (chunks) to a client. When there is a large volume of search results, the chunking reduces the response time by allowing partial results to be quickly returned to the client, thus reducing the overall response time for a science user to receive the partial search results. The user can take advantage of this capability by clicking on the **VIEW PARTIAL SEARCH RESULTS NOW** link illustrated in Figure 14.

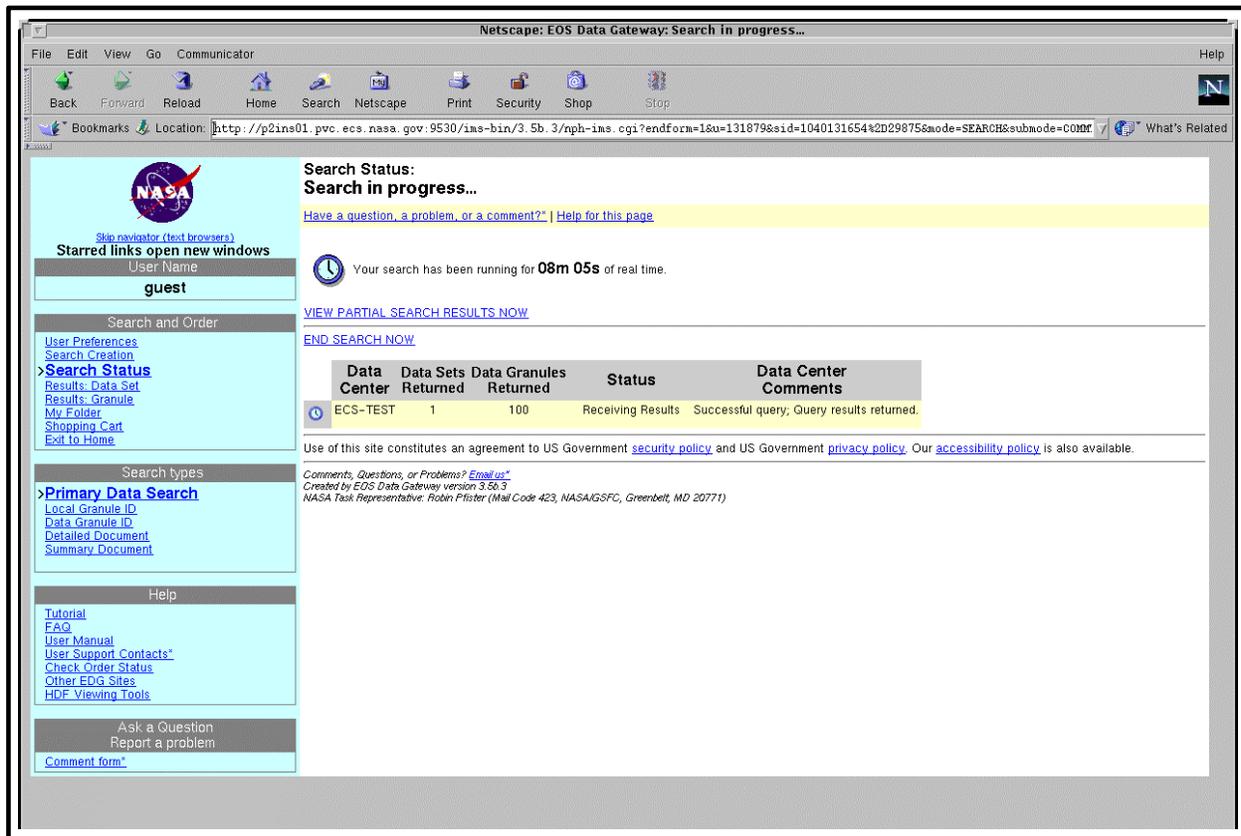


Figure 14. Search and Order Tool, Search in Progress Screen

When the search is complete, the Search and Order Tool provides information on the results to the user. Figure 15 illustrates the initial results page with the Data Granule List.

The screenshot shows a Netscape browser window titled "Netscape: EOS Data Gateway: Listing". The address bar shows the URL: http://p2ins01.pvc.ecs.nasa.gov:9530/ims-bin/3.5b.3/rqb-ims.cgi?ul32602. The page content includes a NASA logo, a search bar, and a table of results.

Results: Granule: Listing

Have a question, a problem, or a comment? | Help for this page

Search and Order

Select	Granule Information	On-line Access	Image Quicklook	Request Sample	Granule	Start Date	Stop Date	Center Point	Data Set
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000767701	19 Jul 1997, 01:31:09	19 Jul 1997, 01:31:09	44.74° Lat, - 53.64° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000550403	19 Jul 1997, 01:31:09	19 Jul 1997, 01:31:09	44.74° Lat, - 53.64° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000730533	19 Jul 1997, 01:31:09	19 Jul 1997, 01:31:09	44.74° Lat, - 53.64° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000433105	19 Jul 1997, 01:31:09	19 Jul 1997, 01:31:09	44.74° Lat, - 53.64° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-20005037311	19 Jul 1997, 01:31:09	19 Jul 1997, 01:31:09	44.74° Lat, - 53.64° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-20005036269	19 Jul 1997, 01:31:09	19 Jul 1997, 01:31:09	44.74° Lat, - 53.64° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000767711	19 Jul 1997, 01:31:17	19 Jul 1997, 01:31:17	45.27° Lat, - 53.63° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-20005036270	19 Jul 1997, 01:31:17	19 Jul 1997, 01:31:17	45.27° Lat, - 53.63° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000550404	19 Jul 1997, 01:31:17	19 Jul 1997, 01:31:17	45.27° Lat, - 53.63° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001
<input type="checkbox"/>	Attributes Pricing	Access Unavailable	Image	Sample	SC-AST_L1A.001-2000433106	19 Jul 1997, 01:31:17	19 Jul 1997, 01:31:17	45.27° Lat, - 53.63° Lon	ASTER LEVEL 1A DATA SET - RECONSTRUCTED, UNPROCESSED INSTRUMENT DATA V001

You are currently viewing items 1 through 10 out of 100 total

1 - 10 | 11 - 20 | 21 - 30 | 31 - 40 | 41 - 50 | 51 - 60 | 61 - 70 | 71 - 80 | 81 - 90 | 91 - 100

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Comments, Questions, or Problems? [Email us!](#)
 Created by EOS Data Gateway version 3.50.3
 NASA Task Representative: Peter Pflieger (Mail Code 423, NASA/GSFC, Greenbelt, MD 20771)

Figure 15. Search and Order Tool, Results Listing Data Granules

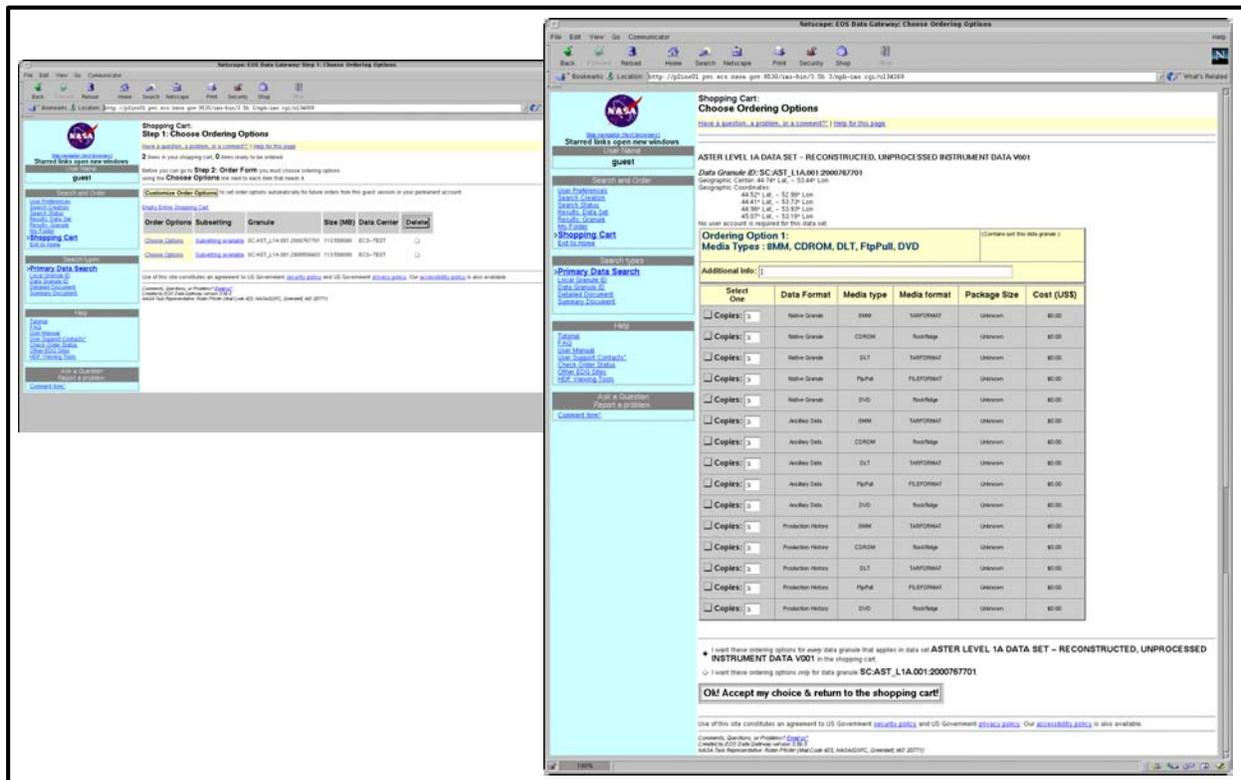


Figure 17. Search and Order Tool, Ordering Options Screens

Back at the shopping cart display, with ordering options specified, the user now clicks on the **Go to Step 2: Order Form** button. This action launches the order form, as illustrated in Figure 18. Here the user provides ordering information (e.g., name, address, telephone, e-mail address). Red field labels indicate required fields.

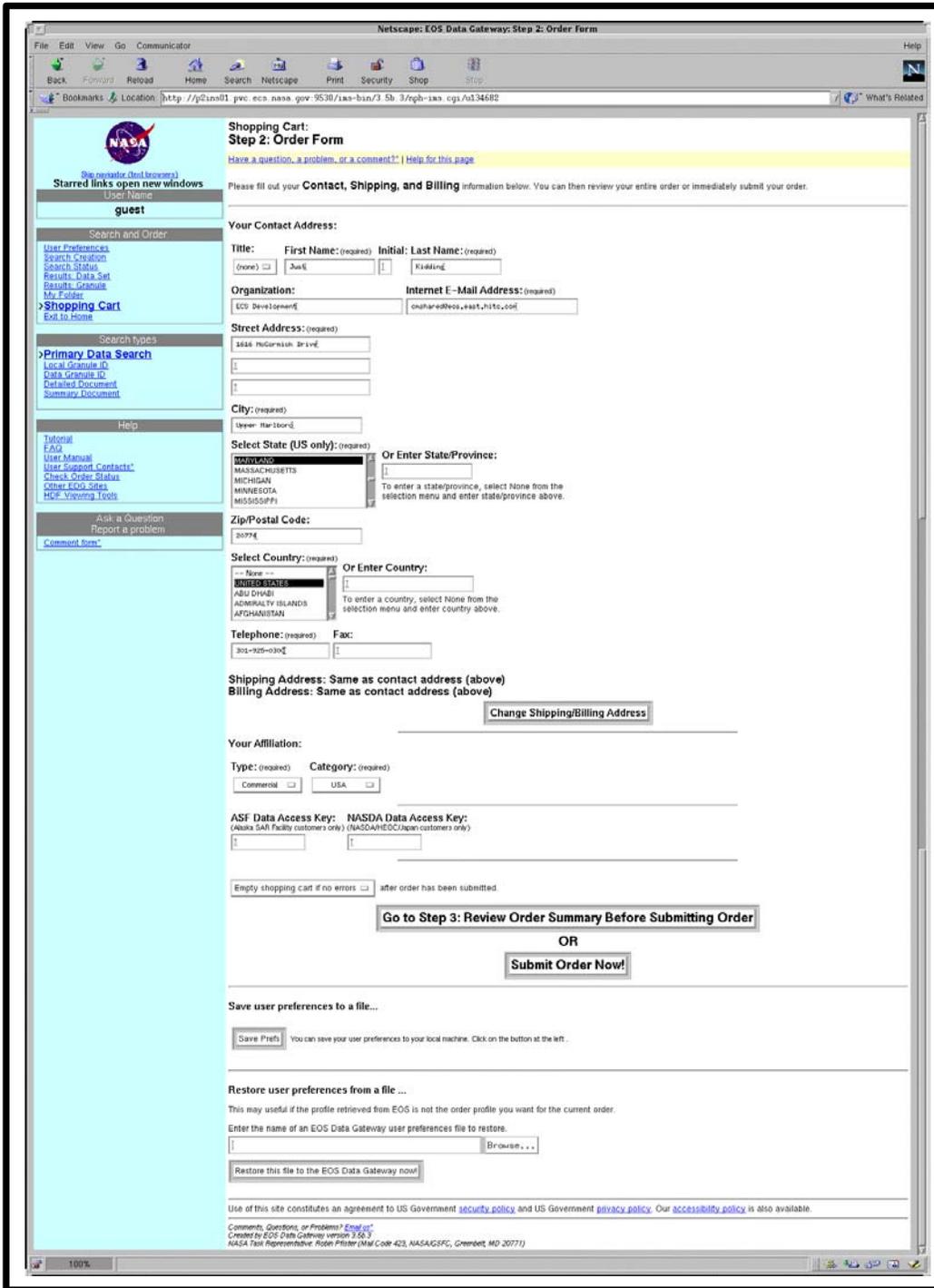


Figure 18. Search and Order Tool, Order Form

After entering the necessary ordering information on the Order Form, the user may click on the **Submit Order Now!** button or click on the **Go to Step 3: Review Order Summary** button and then, when satisfied that the information is correct, click on the **Go to Step 4: Submit Order** button. When the order is submitted, the Search and Order Tool displays an order confirmation screen, as illustrated in Figure 19, providing the user with tracking and contact information to use if it later becomes necessary to inquire about the status of the order.

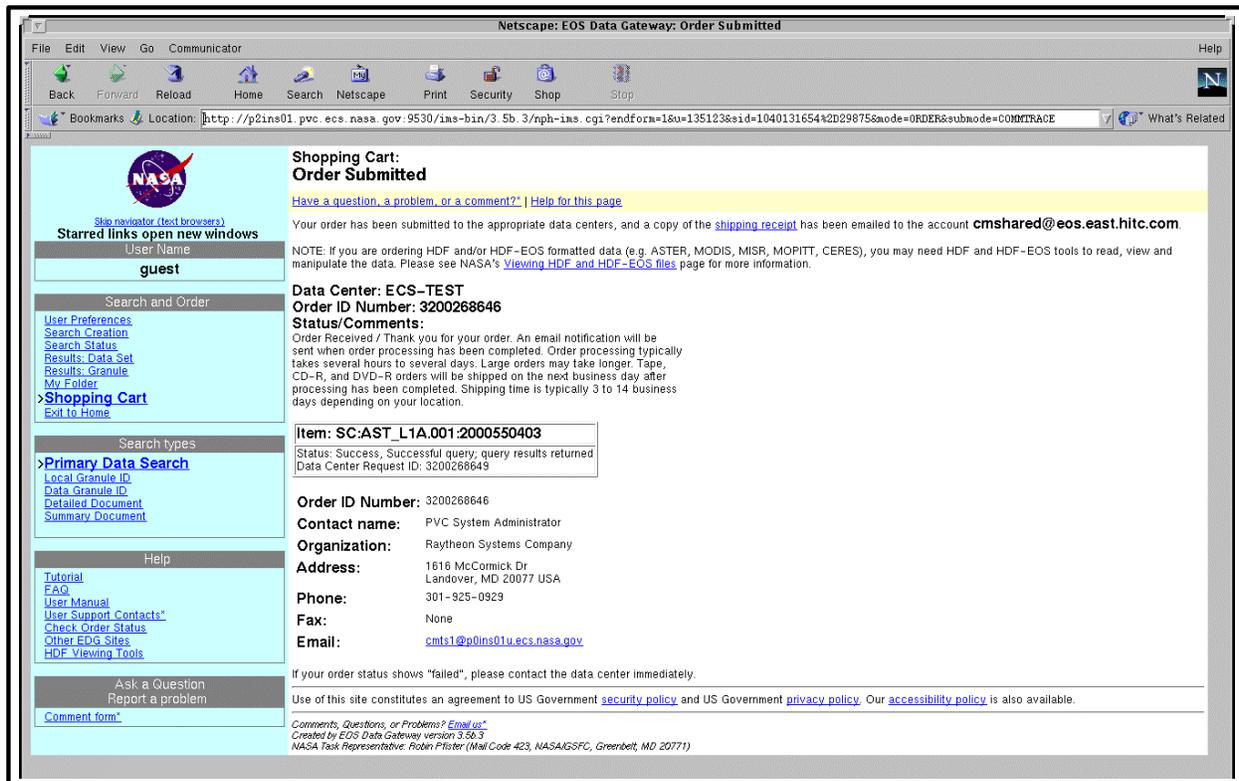


Figure 19. Search and Order Tool, Order Confirmation

Let's examine how you can conduct a data search. You recall, or can check in the User Contact Log record Long Description, that Dr. Fingerma asked for the following data:

Long Description: Search/order data: Parameter Land Surface Temperature, Platform Terra, Sensor MODIS, Data Set MODIS/TERRA Land Surface Temperature/Emissivity 5 min L2 Swath 1km V001, Data Center GSFC, Start/Stop 06 Jun 2000/31 Aug 2000, Search Region 40 DEG to 70 DEG LATITUDE, -100 DEG to -65 DEG LONGITUDE.

Use the following procedure.

Locate and Order Data Using the EOS Data Gateway Search and Order Tool

- 1 Access the command shell.
 - The command shell prompt is displayed.
- 2 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 3 Start the log-in to a Netscape host by typing **/tools/bin/ssh *hostname*** (*e.g.*, g0css02, e0css02, l0css02, n0css02) at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '*user@localhost*'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase; go to Step 5.
- 4 If a prompt to **Enter passphrase for RSA key '*user@localhost*'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 6.
- 5 At the *<user@remotehost>*'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - You are logged in and a UNIX command shell prompt is displayed.
- 6 Type **netscape** and then press the **Return/Enter** key.
 - The Netscape web browser is displayed.
- 7 Click in the **Netsite:** field.
 - The field is highlighted.
- 8 Type **http://redhook.gsfc.nasa.gov/~imswww/pub/imswelcome** and then press the **Return/Enter** key.
 - The EOS Data Gateway welcome screen is displayed, offering choices for types of entry, registration, news, user manual, sample data, and other information.

- 9 Click on the link for "Enter as Guest."
 - The EOS Data Gateway Web Search and Order Tool initial **Search Creation: Primary Data Search** screen is displayed.
 - *Note:* At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
- 10 Click on the **Choose Keywords for Selected Data Sets** button.
 - The search screen displays an option to **Choose Keywords for One or More Categories**.
- 11 In the **Choose Keywords for One or More Categories** field, click on **DATA SET** and then click on the **Choose Keywords for >>** button.
 - The **Keyword Selection: Data Set** screen is displayed.
- 12 On the **Keyword Selection: Data Set** screen, in the **Data Set List 1:** field, scroll down the list and select **ASTER LEVEL 1B DATA SET REGISTERED RADIANCE AT THE SENSOR V002**, and then click on the **OK!** button.
 - The primary search screen is displayed, indicating **ASTER LEVEL 1B DATA SET REGISTERED RADIANCE AT THE SENSOR V002** as the selected data set.
- 13 In the **Choose Keywords for One or More Categories** field, click on **PARAMETER** and then click on the **Choose Keywords for >>** button.
 - The **Keyword Selection: Parameter** screen is displayed.
 - *Note:* The Primary Data Search screen provides a user with a button to **Show List of All Data Sets Available** as a first step in data search and order. The user may filter the list by site, or enter patterns and look for matching data sets.
- 14 On the **Keyword Selection: Parameter** screen, in the **Parameters:** field, select **BRIGHTNESS TEMPERATURE**, and then click on the **OK!** button.
 - The **primary** search screen is displayed, indicating **BRIGHTNESS TEMPERATURE** as the selected parameter.
 - *Note:* The **Filters for Parameter:** field permits a reduction in the number of parameters from which to **choose** (although in the list for this step, **BRIGHTNESS TEMPERATURE** is the only one listed). For example, if you are searching for **OZONE** and know that it is an **ATMOSPHERIC CHEMISTRY** parameter, you can select **ATMOSPHERIC CHEMISTRY** in the **Filters for Parameter:** field and then click the **Apply** button so that only those parameters are displayed. You can even reduce the choice to one by using a wild card filter, i.e., **OZ***.

- 15** In the **Choose Search Area** section of the primary data search screen, click on the radio button at the left of **Type in Lat/Lon Range** field.
- The **radio** button is filled in to indicate selection.
 - If you select a radio button for one of the map entries, a map window is displayed; to use the map, follow instructions on the screen to create a rectangle over the area of interest on the map (the **corresponding** lat/lon values will be displayed in the appropriate fields when you return to the primary search screen).
- 16** In the Latitude and Longitude fields, enter values to define a rectangle corresponding to the requested area (70 degrees Northern, -60 degrees Eastern, 30 degrees Southern, -170 degrees Western).
- The entered values appear in the fields.
 - If desired, a click on the **<-Display lat/lon range on map** button will result in a rectangle corresponding to the selected area on the map on the left side of the **Choose Search Area** section.
- 17** Click in the **Start Date:** field, and then type **2001-03-01**.
- The typed entry is displayed in the field.
- 18** Click in the **End Date:** field, and then type **2001-03-31**.
- The typed entry is displayed in the field.
- 19** Click on the **Start Search!** Button.
- The search status screen is displayed, indicating **Search in progress**
 - **After** a few moments, the **Results: Granule: Listing** screen is displayed.
 - The system offers *Integrated Browse*; if a browse image is available for a listed granule, an **Image** link is available in the **Image Quicklook** column of the listing for that granule. A click on the **Image** link displays the available browse image.
- 20** If desired, click on the **Granule Attributes** link next to one of the listed granules.
- A **Data Granule Attributes** screen is displayed.
 - Attributes for additional granules may be reviewed by clicking on one of the **Next/Previous Granule** links at the top of the **Data Granule Attributes** screen, or by clicking the browser **Back** button and clicking on the **Granule Attributes** link next to other listed items.

- 21** At the **Results: Granule: Listing** screen, click in the **Select** box(es) to select one or more granules to be ordered, and then click on the **Add selections to cart** button near the top of the screen to add the *selected* data granules to the shopping cart.
- A **Data Quality Summary** screen may be displayed describing the quality status of any selected granule(s) and requiring a click on an **Accept** button at the bottom to proceed with the order.
 - The **Step 1: Choose Ordering Options** screen is displayed with the list of items to be ordered (i.e., in the shopping cart).
- 22** Click on the **Choose Options** link next to one of the data granules selected for order.
- The **Choose Ordering Options** screen is displayed.
- 23** Click on the **Select** button for the desired option (e.g., **FtpPull FILEFORMAT**).
- The **Select** button is filled to indicate selection of the option.
- 24** Below the list of options, make a selection to indicate whether the selected packaging option is to apply to all items in the data set in the shopping cart, or just to the single granule (for this exercise, leave the default selection indicating that the selected packaging option is to apply to all items in the shopping cart).
- 25** Click on the **Ok! Accept my choice & return to the shopping cart!** button.
- The **Step 1: Choose Ordering Options** screen is displayed with indications that the selected granules are ready to order.
- 26** Click on the **Go to Step 2: Order Form** button.
- **The Step 2: Order Form** screen is displayed.
- 27** Click in the **First name:** field and type **Just**.
- The typed **entry** appears in the field.
 - **Note: Normally**, the user's first name is entered in this field. For this exercise, it is important that the user's name be entered as **Just Kidding**, so that the DAAC will not attempt to fill the order.
- 28** Click in the **Last name:** field and type **Kidding**.
- The **typed** entry appears in the field.
 - **Note:** Normally, the user's last name is entered in this field. For this exercise, it is important that **the** user's name be entered as **Just Kidding**, so that the DAAC will not attempt to fill the order.

- 29 Fill in the other required fields (**Internet email address:**, **Street Address:**, **City:**, **State/Province:**, **Country:**, and **Telephone:**) by clicking in each field and typing an appropriate entry.
- The typed entries are displayed in the fields.
 - *Note:* The user can save the entered information in a profile, and provide information about ECS access. This is accomplished by clicking on the **User Preferences** link in the "navigator" area on the left side of the screen, and making appropriate entries on the resulting **User Preferences** screen. At the bottom of this screen, a user who is registered as an ECS user can enter a user name and password for ECS access.
- 30 Click on the option button to the right of the **Type:** field and select **Commercial** from the displayed list.
- The **selected** option is displayed in the field.
- 31 Click on the option button to the right of the **Category:** field and select **USA** from the displayed list.
- The **selected** option is displayed in the field.
- 32 Click on the **Go to Step 3: Review Order Summary** button.
- The **Step 3: Order Summary** screen is displayed.
- 33 When satisfied that the order information is correct, click on the **Go to Step 4: Submit Order!** button.
- The **order** is submitted and an **Order Submitted!** confirmation screen is displayed.
-

Update User Contact Log

You recall that upon receipt of the data request, you created a User Contact Log record documenting that request. After completing the submission of the order, it is necessary to update the User Contact Log.

- Show the progress or resolution of the contact that started the process.
- User Contact Log remains open until the request is completed.
- User Contact Log record can be modified several times.
- For each modification, the log displays the operator that made the modification along with the date and time of the modification.

Perform a User Contact Log update for the completed order now using the following procedure.

Update User Contact Log

- 1 Launch the **User Contact Log/Trouble Ticket** application (Remedy Action Request System) as described in the procedure **Create a User Contact Log Record** (previous section of this lesson).
 - A Remedy Action Request System logo window is displayed briefly, followed by a Remedy initial screen from which a number of ECS application forms, including the User Contact Log, may be launched.
- 2 Follow menu path **File**→**Open** or click on the leftmost button near the top of the window.
 - The **Open** dialog box is displayed, showing choices including: **RelB-Contact Log**, **RelB-TT-ForwardToSite**, **RelB-TroubleTickets**, and **RelB-TT-ForwardToSMC**.
- 3 Click on **RelB-Contact Log** to highlight it and then click on the **Search** button.
 - The **Search RelB Contact Log** window is displayed.
- 4 Click on the field to be used for finding the User Contact Log record to be updated (i.e., **Log Id** field, **Contact Name** field, **E-mail Address** field, or the **Short Description** field).
 - The cursor is displayed in the selected field.
- 5 Enter the information appropriate for the selected field (i.e., **Log Id**, **Contact Name**, **E-mail Address**, or something remembered from the **Short Description**).
 - The typed entry is displayed in the field.
- 6 Follow menu path **Actions**→**Search**.
 - The User Contact Log record for the data request is displayed.
- 7 Click on the **Comment Log** field.
- 8 Enter a **Comment** describing the update.
 - The comment should indicate the action(s) taken (e.g., **Order for data completed; 10 granules ordered.**).
- 9 Click the **Save** button near the upper right corner of the window (or follow menu path **Actions**→**Save**).
 - The User Contact Log record update is submitted to the database.
 - The **Modified-date** field will display the date and time of the modification.
 - The **Last-Modified-by** field will display the name of the User Services Representative under whose log-in the edit is made.

- 10** To close a User Contact Log record, select the **Log Status** button, while holding the mouse button down, drag it to **Close**, then release the mouse button. Then save as in Step 9.
- The User Contact Log record is now closed.
-

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Canceling/Tracking an Order

A user may choose to cancel a data order for any of a number of reasons. User Services may be called upon to assist by performing the cancellation on behalf of the user. Cancellation requires some associated procedures that are familiar to you by now. Therefore, the primary focus of this topic is on the procedures that are new to you. The procedures for cancellation of an order are:

- Create a User Contact Log record.
- Validate the user.
- ECS Order Tracking (New).
- Cancel Order (New).
- Update the User Contact Log.

Assume Dr. Fingerman calls to cancel his order for Antarctic Ozone data. As we have seen, this requires the creation of a User Contact Log record, and necessitates using the ECS User Account Management tool, Profile Account, to verify that the user is registered. Only then can you proceed to the next step.

ECS Order Tracking

To locate an order, either because a user wants to cancel it or for some other reason (e.g., a user wants to check on an order that has not been received), use the Order Tracking tool. Figure 20 shows the Order Tracking tool main screen and the **Update** dialog box that permits cancellation of the order.

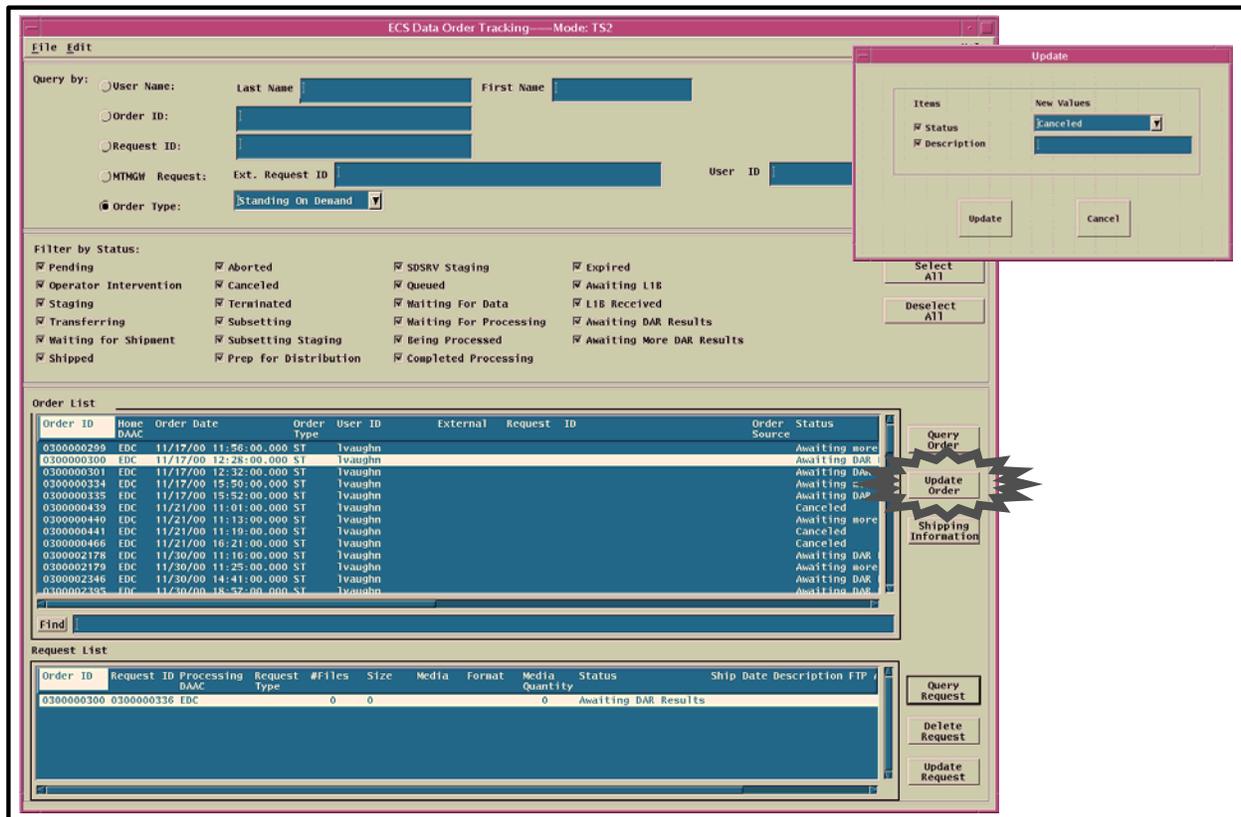


Figure 20. ECS Order Tracking Tool Main Screen, with Update Dialog

To assist you in finding an existing order, the Order Tracking Tool has several query options:

- User Name – If there is more than one order under the same first and last name, the system offers a Verify User Selection screen to display additional data about each order, including the date it was placed, to help in the verification. For a given user, the system also permits filtering to display ASTER On-Demand orders only.
- Order ID – The Order ID is the unique identification number generated when the order was placed.
- Request ID – For large orders, the Data Server may partition the order and assign more than one Request ID. If you use this query option, the unique Order ID will also be displayed to assist in tracking all parts of the order.
- MTMGW by External Order ID or user ID -- To facilitate access by Science Investigator-led Processing Systems (SIPS) for searching and ordering input data for reprocessing, ECS provides Machine-to-Machine Gateway (MTMGW) interfaces. This query option retrieves information on orders through MTMGW access.
- Order Type -- The order list may be filtered by order type (e.g., All, Standard, On Demand, Standing On Demand, MTMGW).

When you click the **Query Order** button to display the list of orders, a **Verify User Selection** dialog box, illustrated in Figure 21, may be displayed requesting a user ID, name, or e-mail ad-

dress. Requiring input to this dialog provides a means to limit access to the database. To display the orders, it is necessary to click on the **OK** button.



Figure 21. Order Tracking Tool, User Selection Verification

The number of orders displayed can be reduced by use of the Filter by Status option. You may select from several status filters:

- Pending.
- Operator Intervention.
- Staging.
- Transferring.
- Waiting for Shipment.
- Shipped.
- Aborted.
- Canceled.
- Terminated.
- Subsetting.
- Subsetting Staging.
- Prep for Distribution.
- SDSRV Staging.
- Queued.
- Waiting for Data.
- Waiting for Processing.
- Being Processed.
- Completed Processing.
- Expired.
- Awaiting L1B.
- L1B Received.
- Awaiting DAR Results.
- Awaiting More DAR Results.

Use the following procedure to find and cancel Dr. Fingerman's order for Land Surface Temperature data, beginning with a search using the **User Name** query option.

ECS Order Tracking and Cancellation

- 1 Access the command shell
 - The command shell prompt is displayed.
- 2 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For ***clientname***, use either the local terminal/workstation IP address or its machine name.

- 3 Start the log-in to the MSS client server by typing either `/tools/bin/ssh hostname` (e.g., `g0mss21`) at the UNIX command shell prompt, and then press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type yes (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase; go to Step 5.
- 4 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 6.
- 5 At the `<user@remotehost>`'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
- 6 To change to the directory containing the utility scripts to start MSS accountability GUIs, type `cd /path` and then press the **Return/Enter** key.
 - For *path*, use `/usr/ecs/<MODE>/CUSTOM/utilities`, where *mode* will likely be **TS1**, **TS2**, or **OPS**.
- 7 Type `EcMsAcOrderGUIStart <MODE>`, where `<MODE>` is **TS1**, **TS2**, or **OPS** (or other) as selected in Step 6.
 - The **ECS Order Tracking** window is displayed.
- 8 Click the **Radio Box** to the left of the **User Name**.
 - The cursor moves to the **Last Name** field.
- 9 Enter the **Last Name**, then press **Tab**.
 - The cursor moves to the **First Name** field.
- 10 Enter the **First Name**, then press **Tab**.
- 11 Click on the **Select All** button.
 - All of the status filters are selected.
- 12 Press the **Return/Enter** key or click on the **Query Order** button.
 - The order is displayed in the **Order List** box in the **ECS Data Order Tracking** screen.
 - The **Order ID**, **Home DAAC**, **Order Date**, **Order Type**, **Order Source**, **Status**, **Description**, and **Start Date** are displayed.

- 13** If there are multiple requests, click on the order to highlight it in the **Order List** box, then click on the **Query Request** button.
- Every request number relating to the highlighted Order is displayed.
 - The **Order ID, Request ID, Processing DAAC, Request Type, # Files, Size, Media, Format, Status, Ship Date,** and **Description** are displayed.
- 14** Click on the order or the specific request to be canceled to highlight it.
- 15** To cancel a highlighted request, click on the **Delete Request** button.
- The request is deleted from the system.
- 16** To cancel a highlighted order, first click on the **Update Order** button.
- The Update dialog box is displayed.
- 17** In the **Update** dialog box, make sure the **Status** checkbox has a check in it (click in the checkbox if necessary).
- The Status checkbox displays a check mark.
- 18** Click on the pull-down arrow to the right of the **Status New Values** text field, hold the left mouse button and dragging to select the value "Canceled."
- The Status **New Values** text field displays **Canceled**.
- 19** Click on the **Update** button.
- The order status is changed to **Canceled**.
-

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Troubleshooting Order Tracking Problems

The ECS Order Tracking tool is part of the ECS System Management Support Subsystem (MSS), and uses database functions in that subsystem. If the tool cannot be launched, or does not function (e.g., cannot retrieve orders), you will need to ask the System Administrator to ensure that the Order Tracking Server is functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the GUI while it is apparently functioning normally. Error messages associated with the ECS Order Tracking tool are listed in Appendix A of the *Operations Tools Manual* (Document 609-CD-610-003, Table A.2.6-2). Table 2 is adapted from the corresponding table in Document 609. If a problem cannot be identified and fixed without help within a reasonable period of time, the appropriate response is to call the help desk or submit a trouble ticket in accordance with site Problem Management policy.

Table 2. ECS Order Tracking Tool User Messages

Message Text	Impact	Cause/Corrective Action
No requests found for the order.	A retrieved order has no specific requests.	None.
Unable to read from the Request Database. Try again later.	Unable to retrieve a specified request.	Check Order Tracking Server log files for possible network or server errors; notify System/Network Administrator and/or Database Administrator of problem.
Unable to read from the Order Database. Try again later.	Unable to retrieve a specified order.	Check Order Tracking Server log files for possible network or server errors; notify System/Network Administrator and/or Database Administrator of problem.
No orders were found.	A specified order number is not found in the database.	None.
Please select a request first.	Clicking on Update Request button or Delete Request button does not update or delete request.	Click on a request to select it before clicking on Update Request button or Delete Request button.
No orders match the request ID.	A specified request number is not found in the database.	None.
The order is no longer in the database.	A specified order number cannot retrieve an order.	None.

Table 2. ECS Order Tracking Tool User Messages (Cont.)

Message Text	Impact	Cause/Corrective Action
Please select an order first.	Clicking on Update Order button or Delete Order button does not update or delete order.	Click on an order to select it before clicking on Update Request button or Delete Request button.
Please delete the corresponding requests first!	Unable to delete a specified order.	The order to be deleted has some requests associated with it. Delete the requests first, and then delete the order.
Unable to delete order in the Order Database. Try again later.	A specified order cannot be deleted.	Check Order Tracking Server log files for possible network or server errors; notify System/Network Administrator and/or Database Administrator of problem.
Unable to delete request in the Order Database. Try again later.	A specified request cannot be deleted.	Check Order Tracking Server log files for possible network or server errors; notify System/Network Administrator and/or Database Administrator of problem.
Server error, can not update order.	A specified order cannot be updated.	Check Order Tracking Server log files for possible network or server errors; notify System/Network Administrator and/or Database Administrator of problem.

Checking Order Tracking Server Log Files

Log files can often provide information that will identify possible sources of disruption in Order Tracking server function or communications, suggesting additional checks or actions that may help resolve the problem. The procedure for checking a log file starts with the assumption that the operator has logged in to ECS.

Checking Order Tracking Server Log Files

- 1 Log in to the host for MSS applications as in steps 1 - 4 of the procedure for checking Account Management Server log files (previous section of this lesson).
- 2 To view a server log, type **pg filename** and then press the **Return/Enter** key.
 - *filename* refers to the account management log file to be reviewed (e.g., **EcMs AcOrderSrvr.ALOG, EcMsAcOrderSrvrDebug.log**).
 - The first page of the log file is displayed; additional sequential pages can be displayed by pressing the **Return/Enter** key at the **:** prompt.
 - Although this procedure has been written for the **pg** command, any UNIX editor or visualizing command (e.g., **vi, more, tail**) can be used to review the log file.

- Typically, the `<server>Debug.log` captures more detailed information than the `<server>.ALOG`. However, for some servers (e.g., **SDSRV**), there may be significant detail in the `<server>.ALOG`. It is also important to note that the **DebugLevel** setting in the `<server>.CFG` file determines the level of detail captured in the `<server>Debug.log` (**0** is off, a setting of **1** captures status and errors, a setting of **2** captures major events, and a setting of **3** is a full trace recording of all activity). If the **DebugLevel** has been set to one of the lower levels during operations, the System Administrator may set it to **3** during troubleshooting.
- 3** Review the log file(s) to determine if there are any indications of connection problems or errors at start up.
- The **EcMsAcOrderSrvrDebug.log** file for the User Profile/User Registration server may contain an error message concerning **PF Init** error or problem (notify the System Administrator).
 - The **EcMsAcOrderSrvr.ALOG** file may contain evidence of a Sybase error (e.g., **SybaseErrorCode1 =92014;SybaseErrorMessage1 ='x0mss21_srvr'** or **SybaseErrorCode2 =16;SybaseErrorMessage2 =''**) (notify the Database Administrator).
- 4** To exit the **pg** review of the log file, type **q** at the **:** prompt and then press the **Return/Enter** key.
-

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Subscriptions and Data Pool Management

The Data Pool is a repository of selected granules with associated metadata and, if available, browse granules accessible through use of a web browser to search and download by FTP. The Data Pool provides users with a rapid means to obtain granules with associated metadata and any available browse granules. User Services and Science Data Specialists use the Spatial Subscription Server (NSBRV) GUI to create subscriptions for inserting data into the Data Pool and to perform other tasks necessary to manage the Data Pool, as well as to create subscriptions for acquiring data or receiving notifications of data insertions into the ECS Archive. User Services must also be familiar with the tool and able to provide user assistance and support for locating and downloading data from the Data Pool.

Although users have access to the extensive data holdings of ECS through the normal search and order process, that process may be seen to have some limitations:

- slow distribution times due to tape access.
- search and order tool with a complex user interface.
- limited subsetting options.
- difficult to qualify subscriptions spatially.

The Data Pool provides a means to address these limitations, providing:

- online cache of ECS data.
- easy-to-use drill-down web user interface.
- interface from ECS to external subsetters.
- Spatial Subscription Server.

The data pool is characterized by a large online data cache at each DAAC:

67 TB at GSFC (current disk size, usable space 53.6 TB; volume increase likely).

- 49 TB at EDC (current disk size, usable space 39.2 TB; volume increase likely).
- 25 TB at LaRC (current disk size, usable space 20 TB; volume increase likely).
- 2 TB at NSIDC (current disk size, usable space 1.6 TB; volume increase likely).

Data Pool Architecture

Figure 22 provides an overview of the architecture of the Data Pool. The figure illustrates user access to the Data Pool through the web or FTP, and shows use of the Spatial Subscription GUI by an operator, who may be a User Services representative or a Science Data Specialist, to place a Data Pool insertion subscription in the Spatial Subscription Database. As the figure suggests, insertion of a data granule in the ECS archive and associated insertion of metadata in the Science Data Server Database serve to trigger the subscription. The figure also shows Data Pool Maintenance GUI and script tools for operator monitoring and maintenance of the Data Pool.

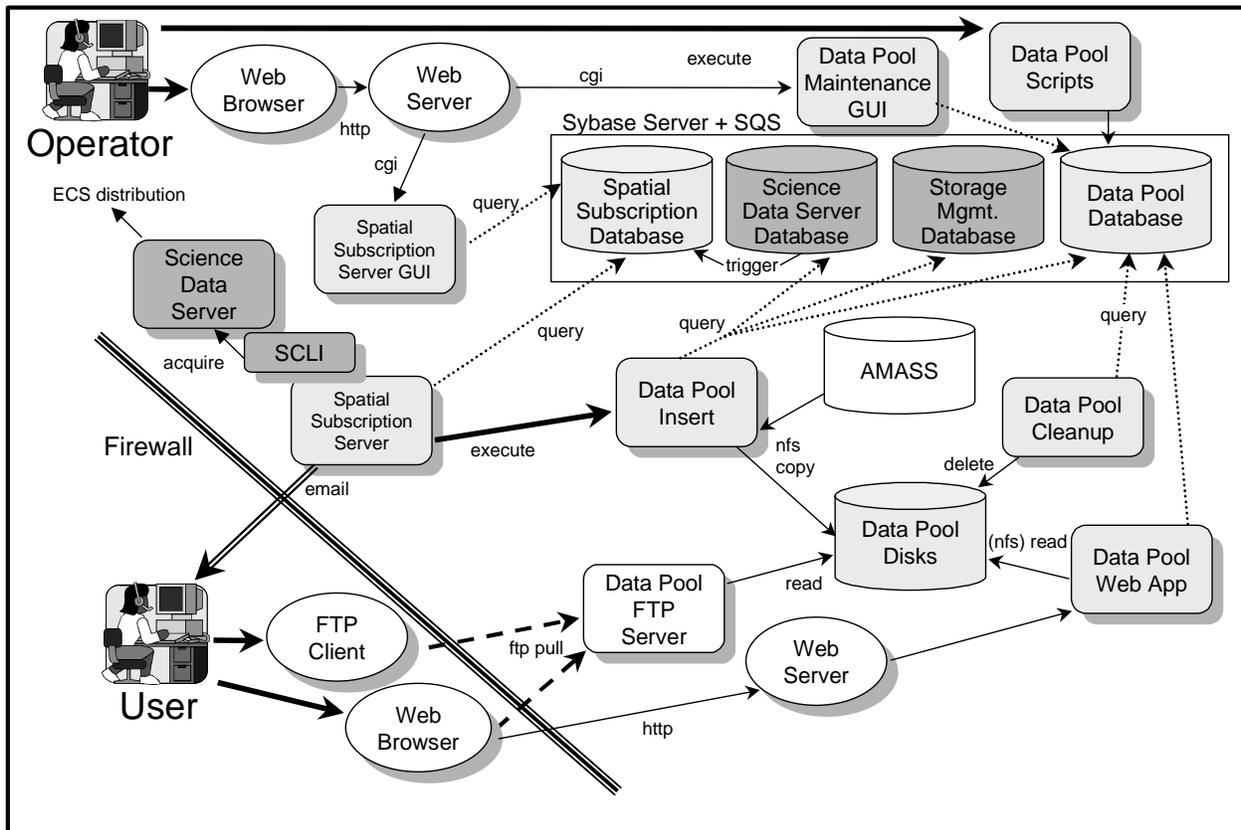


Figure 22. Data Pool Architecture

The limited size of the Data Pool necessitates careful management. Data Pool content and data retention are tailored to user needs. User Services and/or Science Data Specialists are directly involved in managing the content and retention of data in the Data Pool. Users may contact DAAC operations with a request to place a subscription with ECS to have data inserted in the Data Pool. The subscription is triggered by an ECS event (typically, insertion of a Science Data Granule into the ECS Archive), and as a result a copy of the granule, its associated metadata, and any associated browse granules are inserted into the Data Pool. The subscription also typically results in email notification of the requesting user, and may also result in distribution of data to the user. Subscriptions may be qualified spatially, temporally, or by parameter.

Using the Spatial Subscription Server GUI

Most User Services tasks for monitoring and managing the Data Pool require the use of the Spatial Subscription Server (NSBRV) GUI. The NSBRV GUI permits an operator to view subscribable events and review existing subscriptions in the NSBRV database. It allows an operator to add a subscription specifying Data Pool qualification and retention criteria, thus adding a subscription for Data Pool insert to the database. The operator may also create a standard subscription for notification and/or distribution of ECS data products.

For an existing subscription, there may occur circumstances that make it desirable to retain certain data in the Data Pool for a longer period of time than originally specified (e.g., an unusual ground event, such as a volcanic eruption or flood, causes granules for that geographic area to be of more than usual interest). Data Pool maintenance personnel can run a script to update the expiration date for selected science granules. The NSBRV GUI can be used to extend the period of retention in a Data Pool insert subscription for new granules from that area.

The NSBRV GUI is also used to view, update, or delete (cancel) subscriptions in the NSBRV database. Finally, it permits an operator to view the acquire and notification actions currently being processed by the NSBRV, and to view statistics on the processing of events and actions by the NSBRV.

The NSBRV GUI is a web application; Figure 23 illustrates the NSBRV GUI **Home Page**, from which the operator can navigate to other pages to begin specific tasks. As the figure shows, besides the **Home Page** tab, it provides four tabs for access to pages supporting various tasks:

- **List Events:** access to pages for listing subscribable events.
- **Manage Subscriptions:** access to pages for managing subscriptions.
- **Manage Bundling Orders:** access to pages for managing bundling orders.
- **Monitor Queues:** access to pages for monitoring the action queue and listing statistics.

There is also a **Help** tab providing descriptions of the NSBRV functions to provide the operator with assistance in navigating through the GUI.

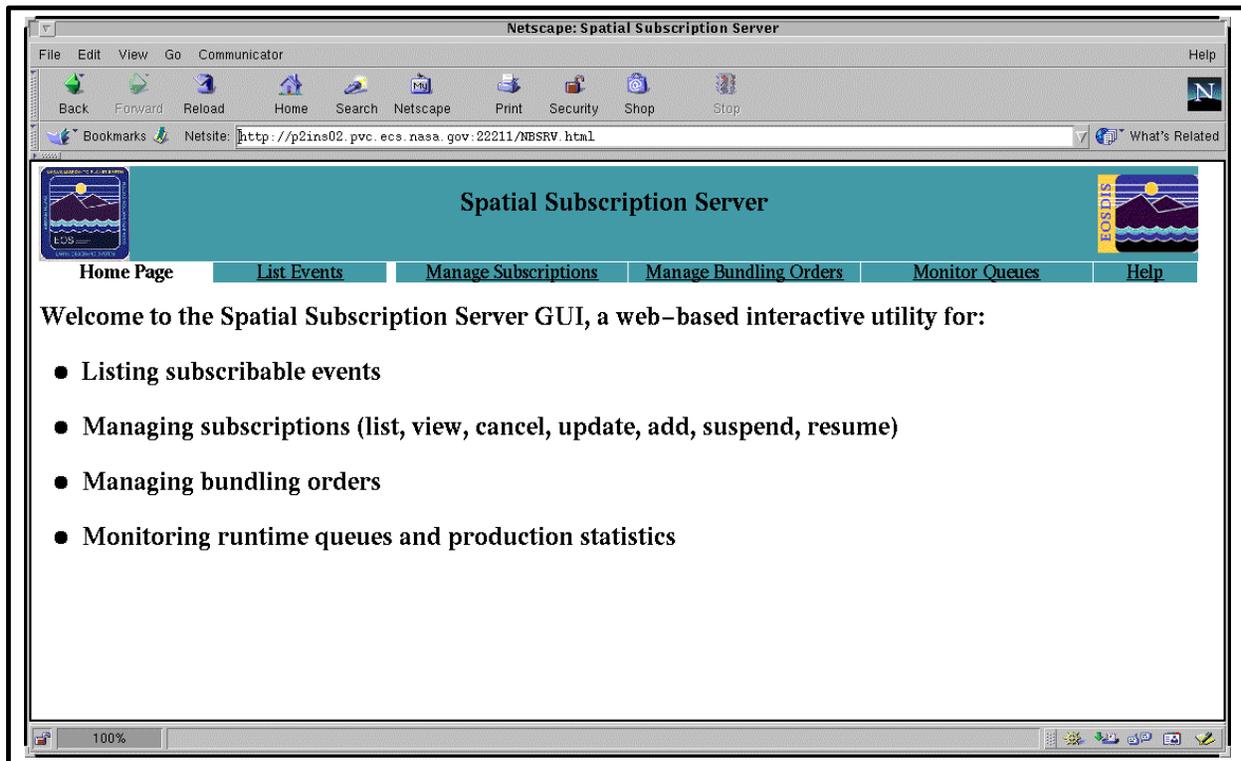


Figure 23. NSBRV Home Page

Figure 24 illustrates the NSBRV **List Events** page. It allows the operator to view all ECS events for which a subscription can be created. The column headers are links permitting the operator to sort the list by collection, version, or event type. There are also three option buttons and a **Filter** button, permitting the operator to filter the list by collection, version, and event type.

Netscape: Spatial Subscription Server

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Shop Stop

Bookmarks Netsite: <http://p2ins02.pvc.ecs.nasa.gov:22211/cgi-bin/EcNbEventFrame.pl> What's Related

Spatial Subscription Server

[Home Page](#)
 [List Events](#)
 [Manage Subscriptions](#)
 [Manage Bundling Orders](#)
 [Monitor Queues](#)
 [Help](#)

Collection
 Version
 Event Type

Collection	Version	EventType
ACR3L0	001	DELETE
ACR3L0	001	INSERT
ACR3L0	001	UPDATEMETADATA
AIR10SCC	001	DELETE
AIR10SCC	001	INSERT
AIR10SCC	001	UPDATEMETADATA
AIR10SCC	077	DELETE
AIR10SCC	077	INSERT
AIR10SCC	077	UPDATEMETADATA
AIR10SCI	001	DELETE
AIR10SCI	001	INSERT
AIR10SCI	001	UPDATEMETADATA
AIR10SCI	077	DELETE
AIR10SCI	077	INSERT

100% 100% of 181K (at 4.6K/sec)

Figure 24. NSBRV List Events page

Figure 25 shows the **Manage Subscriptions** page. This page lists subscriptions existing in the NSBRV database, with columns for **Subscription Id**, **User** for whom the subscription was created, **Collection**, **Version**, **Event Type**, **Status**, and **Expiration Date**. These column headers, except for **Version** and **Event Type**, are links on which the list can be sorted. There are also three option buttons and a **Filter** button, permitting the operator to filter the list by user, collection, and status. Finally, at the right side of the page, there is a **Choose Subscription Action** column permitting operators an option, for each listed subscription, to **View**, **Update**, or **Delete** the subscription, with an **Apply** button to implement a selected option. Note that when this page appears, the GUI displays a new tab, **List Themes**, as shown in the figure.

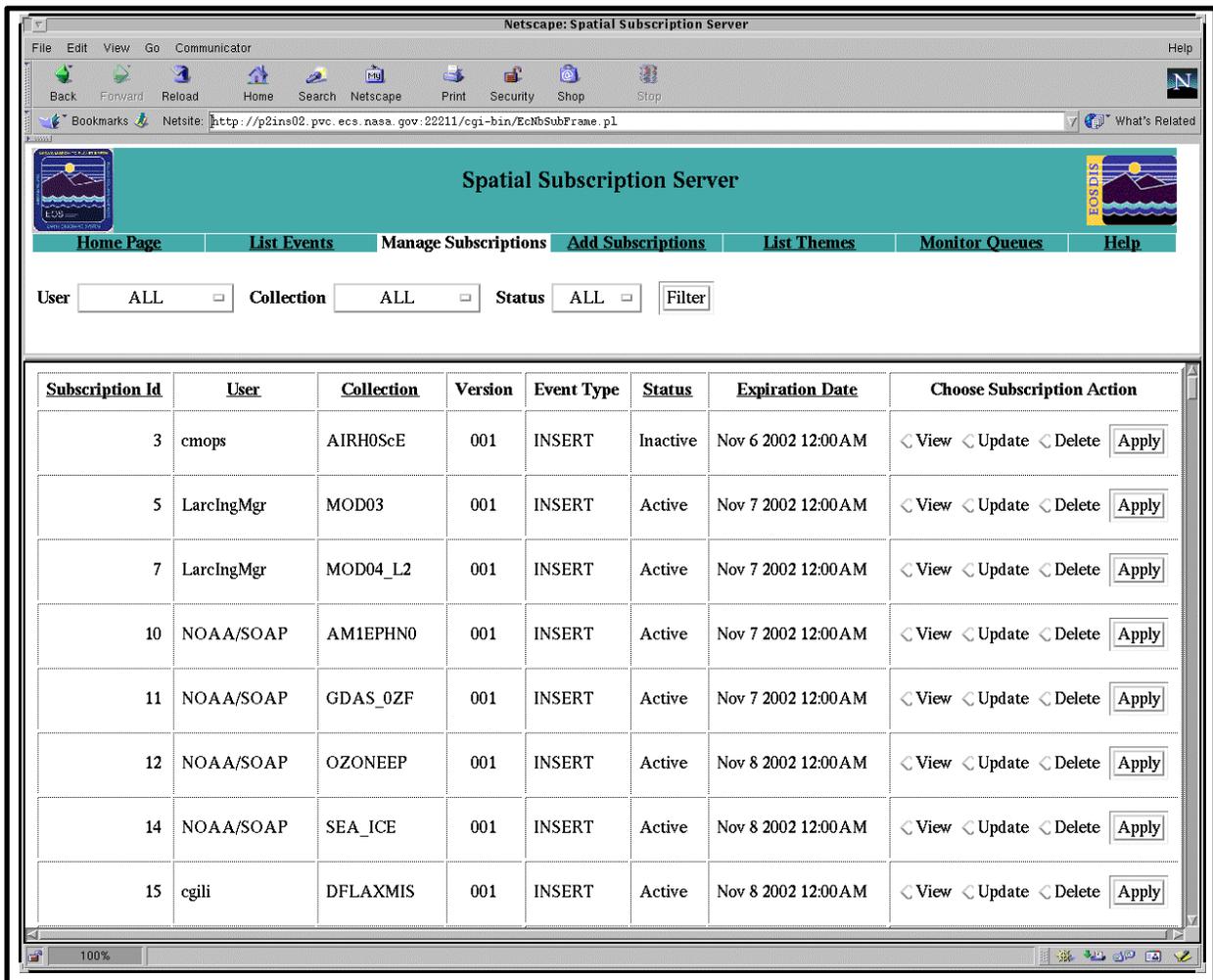


Figure 25. NSBRV Manage Subscriptions page

When the **Manage Subscriptions** page is displayed, the GUI also offers a tab for access to a page permitting the operator to **Add Subscriptions**. Figure 26a and Figure 26b show the **Add Subscriptions** page as it appears after an operator has entered a **User Id** and **Expiration Date**, and selected an **ESDT Short Name/Version/Event Type**. If the subscription is to specify an **Acquire** or **Notify** action, it is necessary to enter information in the **Acquire Information** or **E-Mail Notification Information** portion of the **Actions** block of the form. It is also possible to specify a bundling order associated with acquire actions, to accumulate granules until the achievement of some criterion for completion of a bundle before the data are actually distributed. The entered information is necessary to support notification and distribution for ECS standard products.

Spatial Subscription Server

Home Page List Events Manage Subscriptions Add Subscriptions List Themes Monitor Queues Help

User Id: cmshard Status: Active Expiration Date 11/7/2003

Short Name / Version / Event Type: MOD03001INSERT

Subscription Qualifiers

Integer / Float / Date

Attribute Name/Type	Min Value	Max Value
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

String

Attribute Name/Type	Value
<input type="text"/>	<input type="text"/>

Spatial

Enter coordinates of intersecting LLBOX

North Latitude

West Longitude East Longitude

South Latitude

Action Information

To bundle the subscription, check here and choose from the list below: Bundling Order

Bundling Order Selection

(After choosing a bundling order, skip to the bottom of the page.)

Otherwise choose one or more actions Acquire E-Mail Notification Data Pool

Figure 26a. NSBRV Add Subscriptions page (top)

Enter information below for the actions selected (not applicable for bundled subscriptions)

Acquire Information	
User Profile	<input type="text" value="cckshared"/>
User String	<input type="text"/>
Email Address	<input type="text" value="cckshared@01ns01u.ecs.nasa.gov"/>
Media Format	FILEFORMAT
Media Type	<input type="text" value="FtpPush"/>
Priority	<input type="text" value="XPRESS"/>
Notify Type	MAIL
FTP Information (for FtpPush Only)	
FTP User	<input type="text"/>
FTP Password	<input type="text"/>
Enter password again for verification	<input type="text"/>
FTP Host	<input type="text"/>
FTP Directory	<input type="text"/>

E-Mail Notification Information	
Action Address	<input type="text" value="cckshared@01ns01u.ecs.nasa.gov"/>
User String	<input type="text"/>
Metadata	<input type="text"/>

Data Pool Information	
Retention Period	<input type="text" value="3"/> (in days)
Retention Priority	<input type="text" value="200"/> (valid range 1 thru 255)
Science Granules and/or Metadata	<input type="text"/>
Check here to add theme:	<input type="checkbox"/> Enter first few chars of name:
	<input type="text"/>

Figure 26b. NSBRV Add Subscriptions page (bottom)

If an operator selects and implements the **View** option for a subscription (listed on the **Manage Subscriptions** page), the GUI provides a display similar to that illustrated in Figure 27. The page lists detailed information about the selected subscription, including information concerning any associated theme and any associated bundling order.

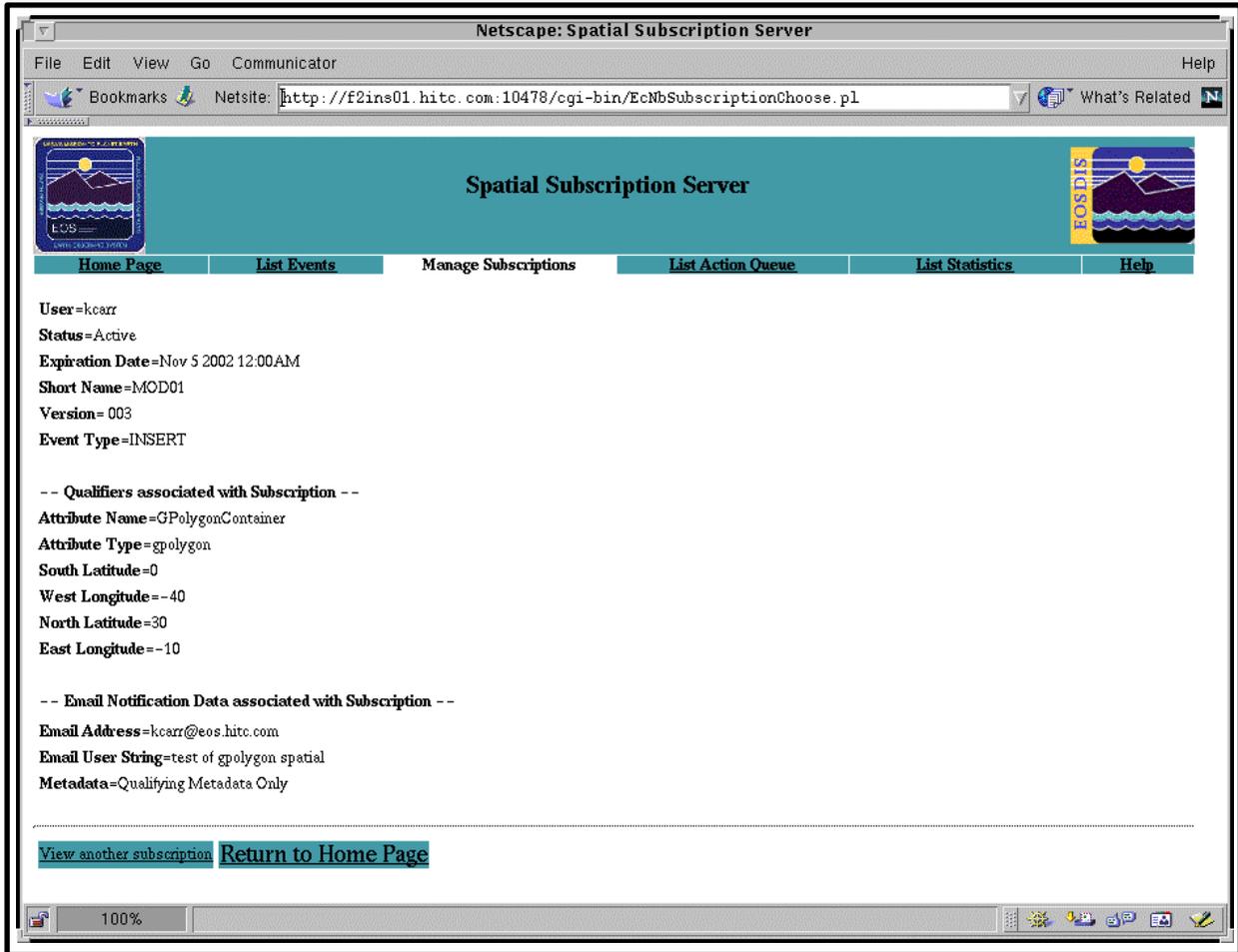


Figure 27. NSBRV View Subscriptions page

If an operator selects and implements the **Update** option for a subscription (listed on the **Manage Subscriptions** page), the GUI provides a display similar to that illustrated in Figure 28. This page is similar to the **Add Subscription** page, permitting the operator to add or change qualifiers and change the action selection for the subscription. Changes are submitted by clicking on the **Update Subscription** button at the bottom of the page.

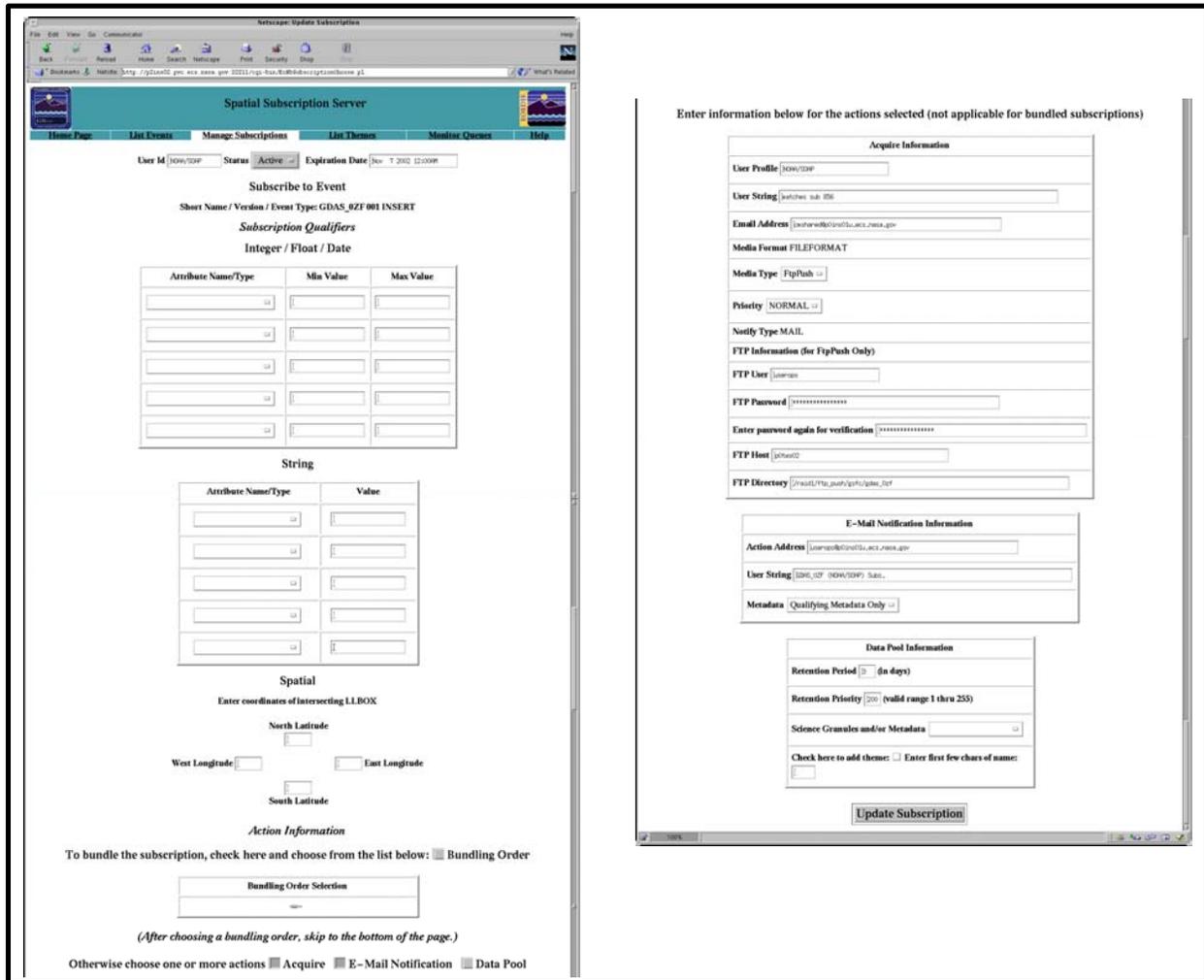


Figure 28. NSBRV Update Subscriptions page

If the operator clicks on the **List Themes** tab while managing subscriptions, the GUI displays the page illustrated in Figure 29. This page permits the operator to obtain a list of themes and associated subscriptions.

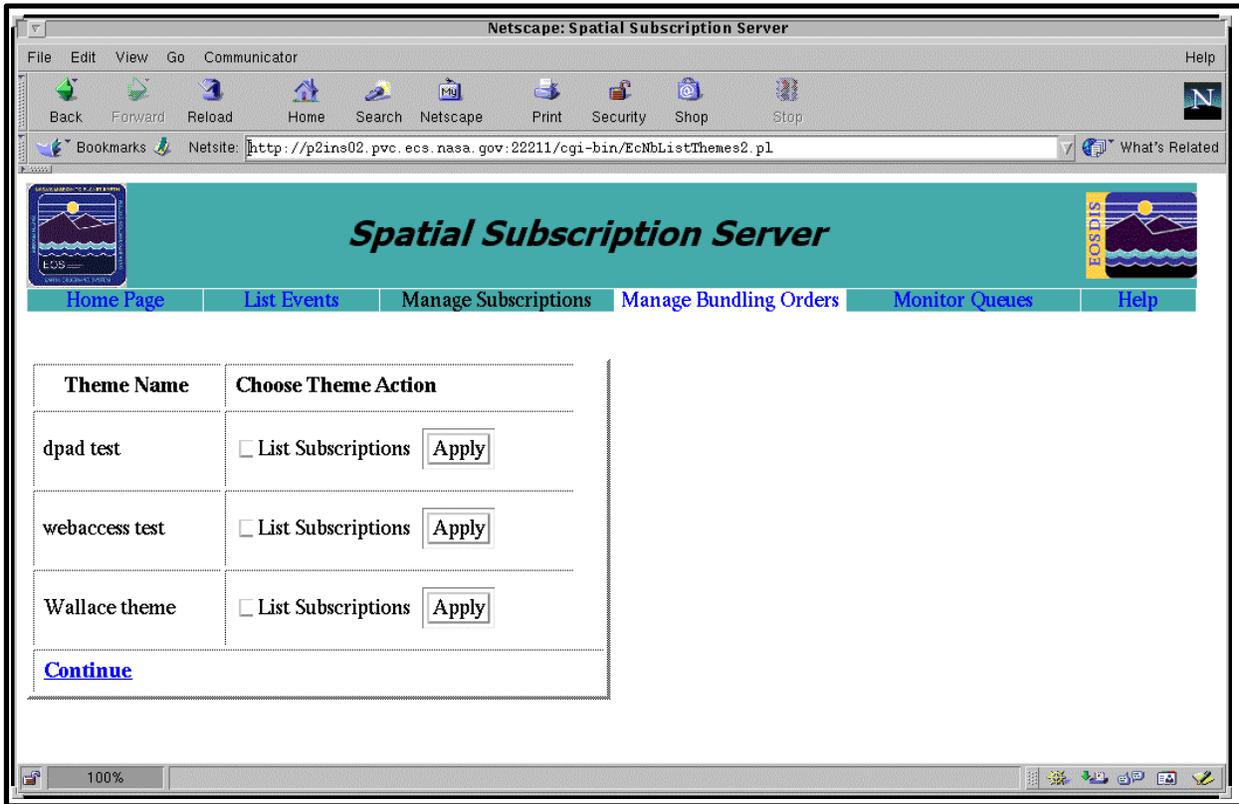


Figure 29. NSBRV List Themes page

If the operator clicks on the **Manage Bundling Orders** tab on the **Home Page** or other page where the tab is available, the GUI displays the page illustrated in Figure 30, listing bundling orders. The list includes a **Bundling Order** identifying number for each bundling order, the **User** for whom the bundling order was created, the **Creation Date** and **Expiration Date**, the **Media Type**, and **Status**. There is an **Add Bundling Order** link to a page where the operator can add a bundling order and a **Configure Defaults** link to a page where the operator can set default parameters for configuring bundling orders. There are also three option buttons and a **Filter** button, permitting the operator to filter the list by user, media type, and status. Finally, at the right side of the page, there is a **Choose Bundling Order Action** column permitting operators an option, for each listed bundling order, to **View**, **Update**, **Cancel**, or **List Subs** (list the subscriptions) associated with the bundling order, with an **Apply** button to implement a selected option. The figure shows the window that is obtained by selecting and implementing the **View** option.

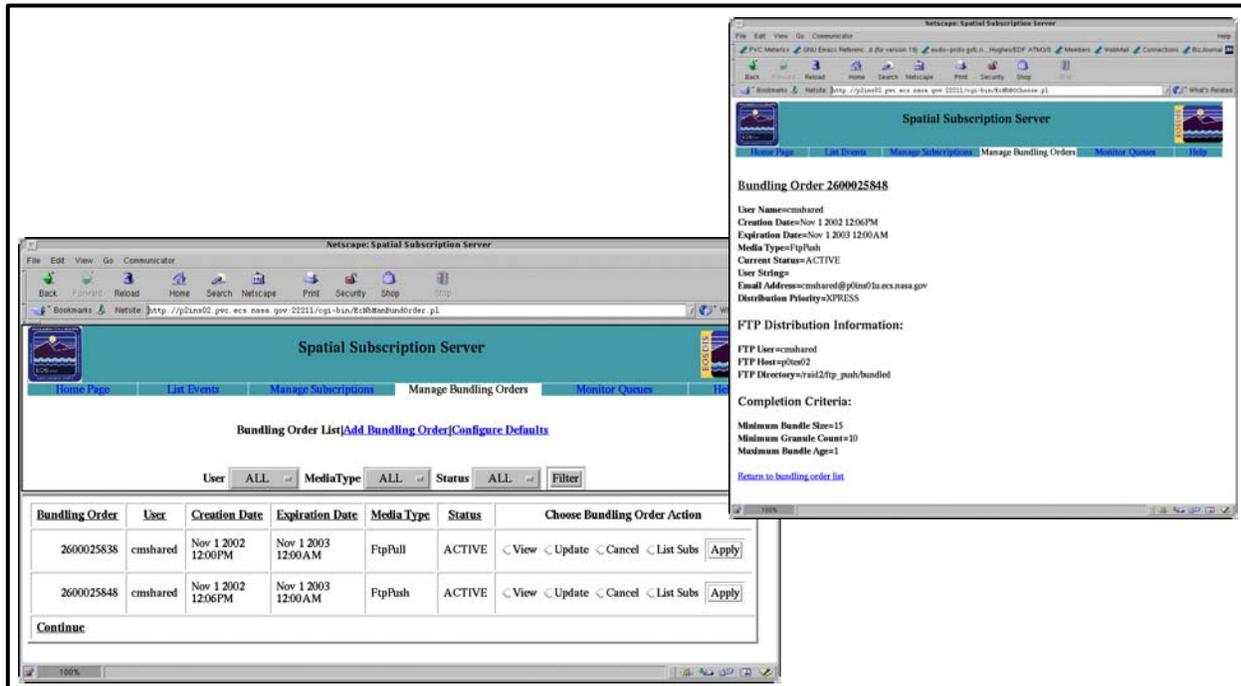


Figure 30. NSBRV Manage Bundling Orders page

If the operator clicks on the **Add Bundling Order** link, the GUI displays the page illustrated in Figure 31. This page contains a field for entry of the operator's **UserID**, a field for specification of an **Expiration Date** for the bundling order (with a default entry), and an option button for selection of a media type (CD ROM, 8 mm tape, DVD, DLT, FtpPush or FtpPull). There is a **continue** button at the bottom to continue to a page for further specification of data related to the bundling order; the data to be entered on the resulting page varies with the media type selection. There is also a **clear** button that can be used to clear the **UserID** field and restore the default **Expiration Date** and **Media Type**.

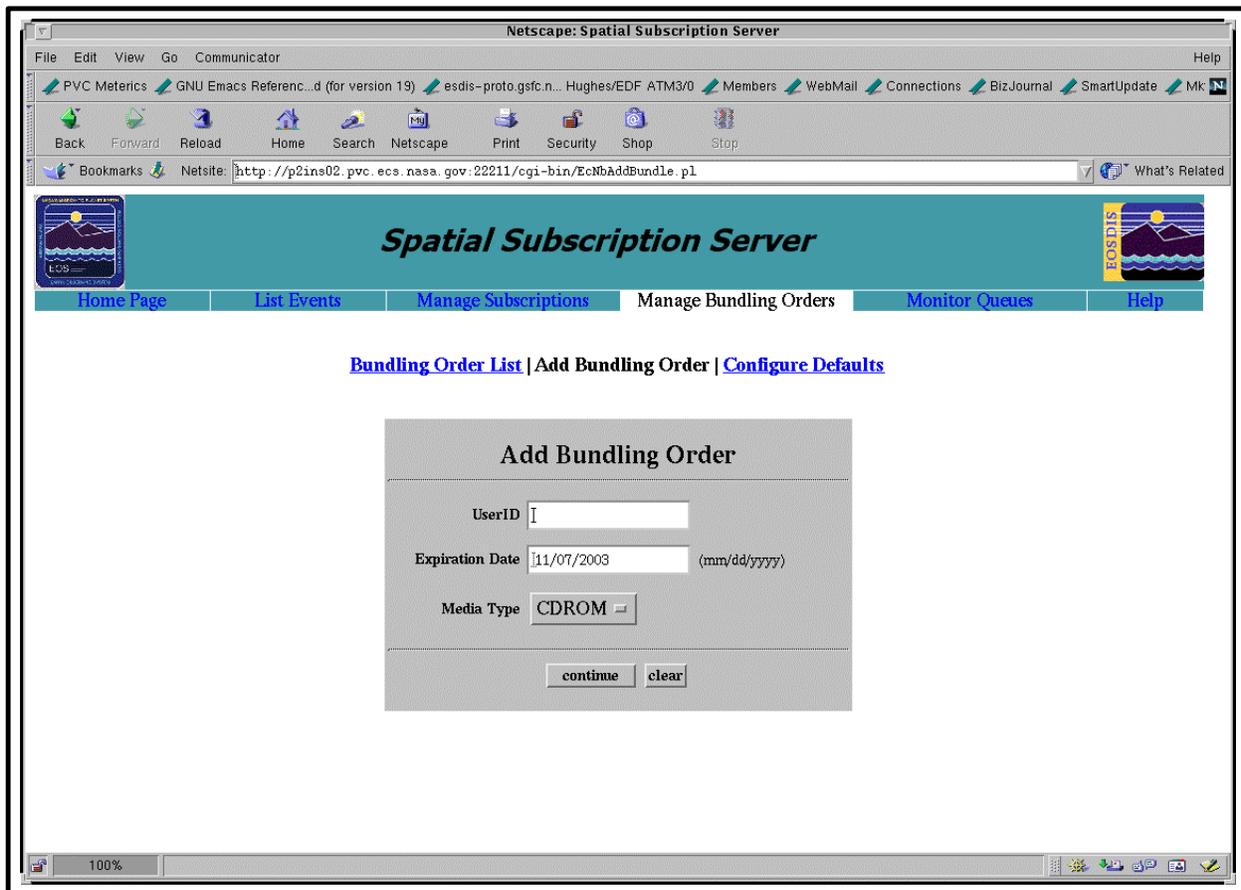


Figure 31. NSBRV GUI Add Bundling Order page

Figure 32 shows the data pages that result from clicking on the **continue** button at the **Add Bundling Order** page when the **Media Type** chosen is a hard media type, an FTP Push, or an FTP Pull, respectively. These pages permit entry of information necessary for full specification of the selected **Media Type**. Each one also requires specification of three criteria for completion of a bundle, whereby fulfillment of any one of the three criteria will trigger distribution of the bundle. The criteria include:

- Minimum bundle size (GB).
- Minimum Granule Count.
- Maximum Bundle Age (days).

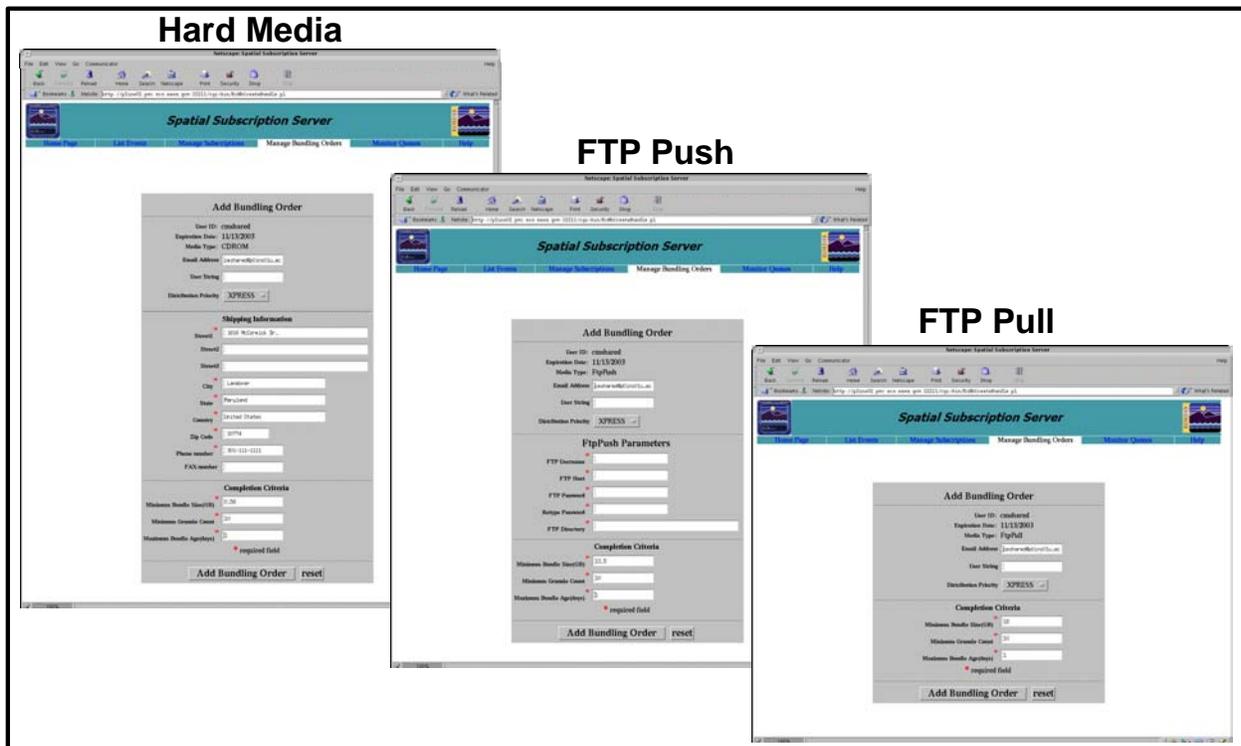


Figure 32. NSBRV GUI Data Pages for adding bundling orders

In addition to the links for listing and adding bundling orders, there is a link on the Manage Bundling Orders tab to **Configure Defaults**. This link provides access to the page illustrated in Figure 33, permitting the operator to set default values for bundle completion criteria. These defaults set the values that appear at the bottom of the data page (see Figure 32) for each media type. As shown in Figure 33, the GUI displays the current values for the minimum granule count and maximum bundle age (days). It also shows the current value for minimum bundle size (GB) for each media and FTP type. The other parameter shown, Bundle Expiration Period (days), refers to the expiration period for the bundling order. There is a **Change to . . .** data entry field for each parameter. The figure also shows an example of the confirmation dialog box that appears when an operator makes an entry in one or more of the data entry fields and then clicks on the **Change Bundling Criteria** button at the bottom. There is also a **Reset** button to clear the data entry fields.

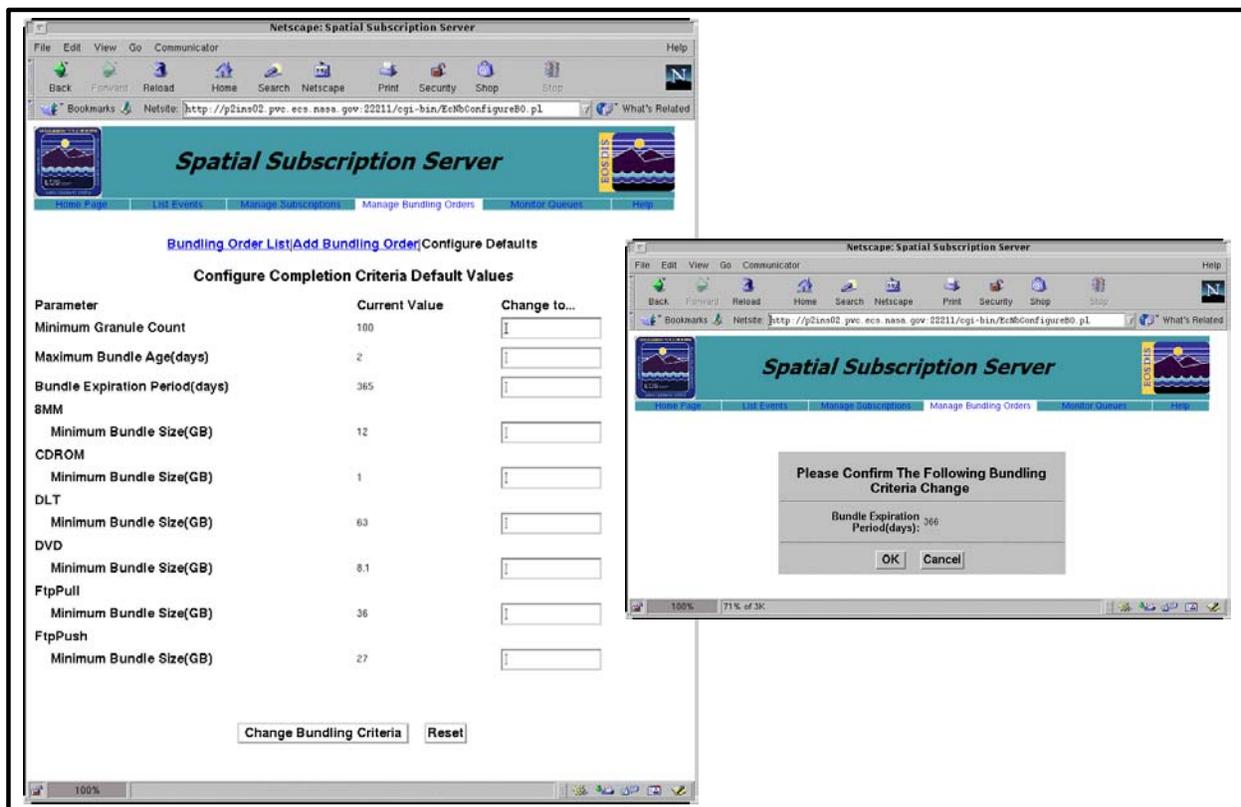


Figure 33. NSBRV GUI page for configuring bundling order completion criteria default values

There are two other major pages of the NSBRV GUI accessible from the **Monitor Queues** tab on the **Home Page**. The **List Action Queue** page, illustrated in Figure 34, provides a table listing acquire and notification actions that are being processed. On this page, the **Action Type** and **Subscription Id** column headers are links for sorting the list, and there are also **Action Type**, **Subscription**, and **Status** option buttons and a filter button for filtering the list.

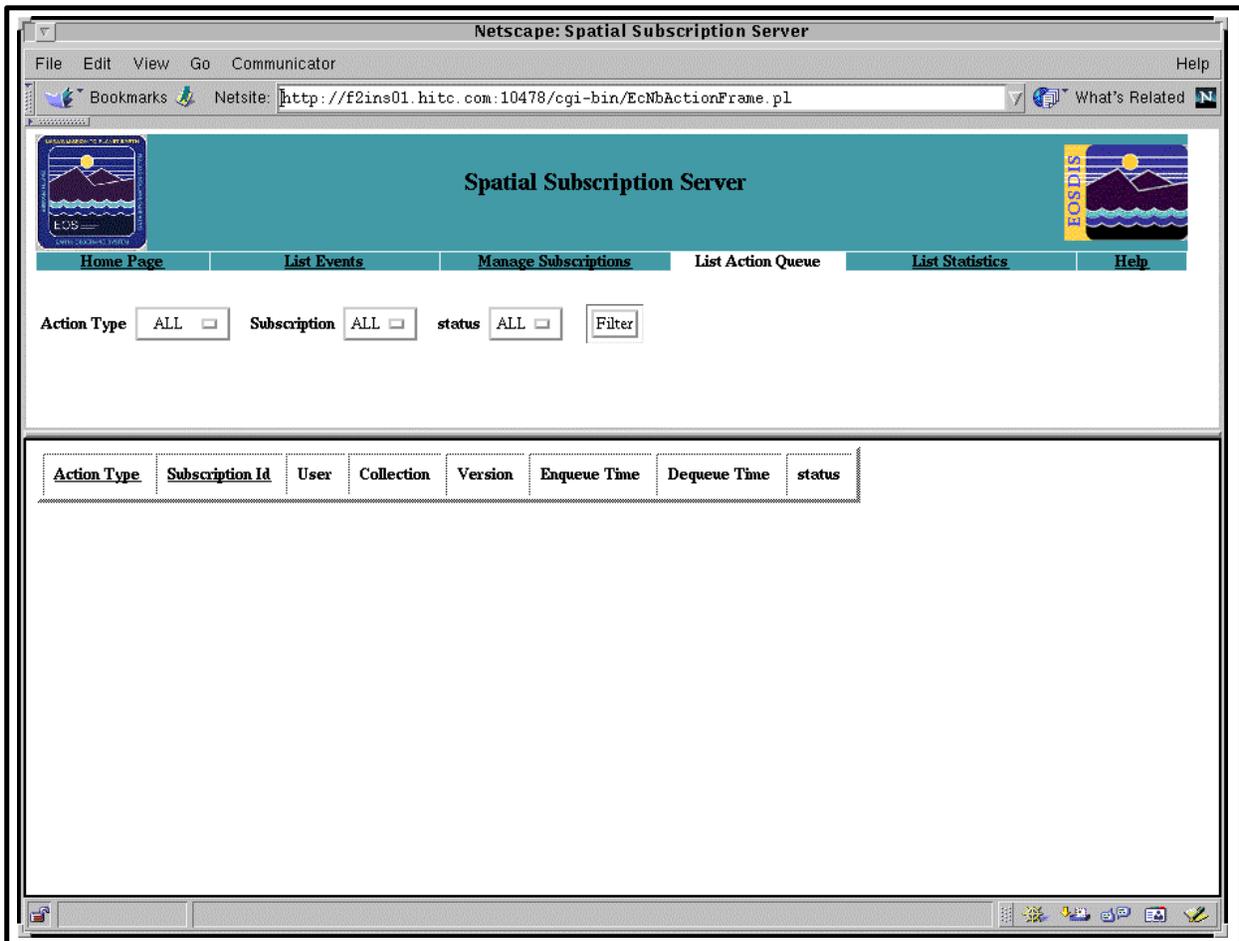


Figure 34. NSBRV List Action Queue page

The remaining major page is the **List Statistics** page, shown in Figure 35. It provides summary information concerning the processing of events and actions related to subscriptions. Using this page, the operator can monitor subscription processing activity, such as numbers of notifications and actions, total and average times for notifications and acquires, and other information.

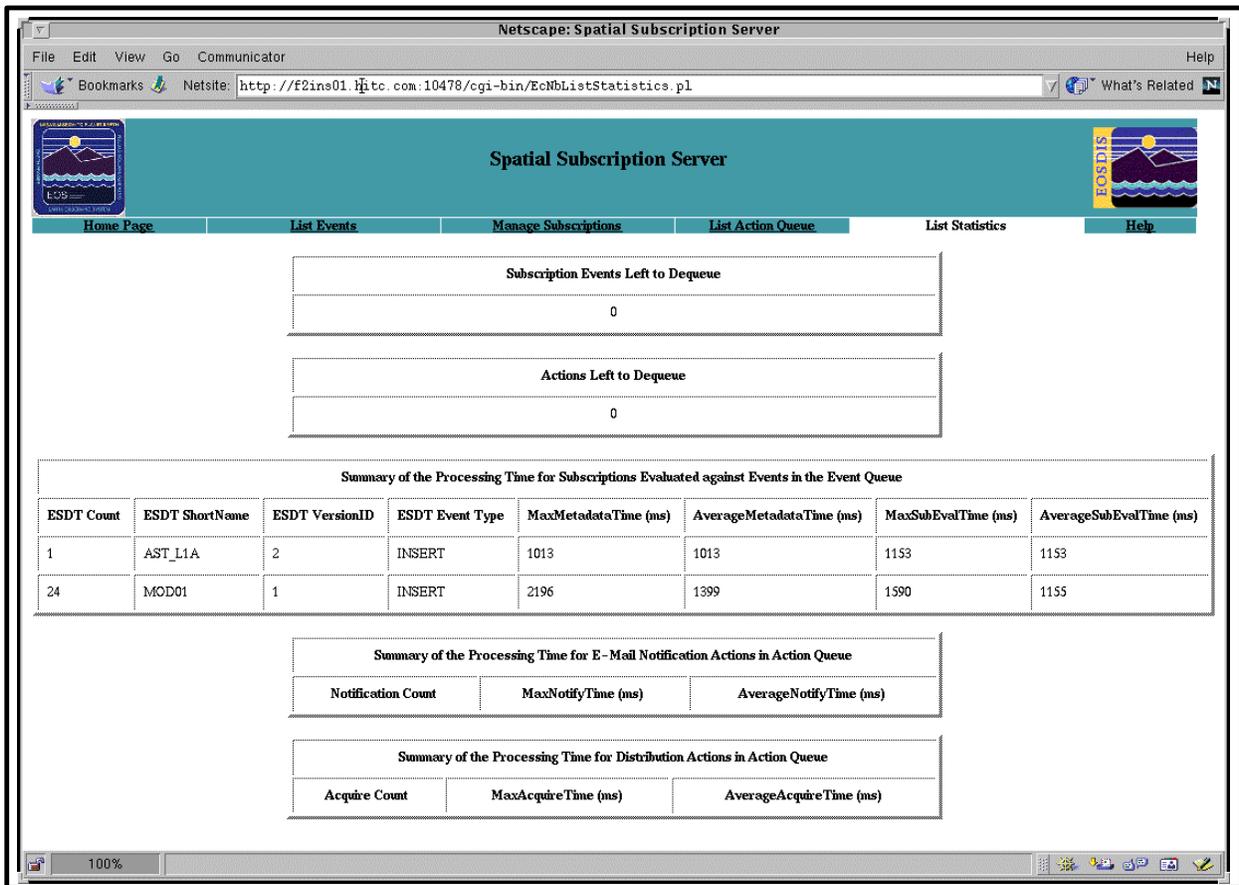


Figure 35. NSBRV List Statistics page

Let's examine how you can use the NSBRV GUI to manage subscriptions. The first thing you will need to do for many functions is to launch the GUI. The procedure for launching the GUI is provided separately here and referenced in other procedures.

Launch the NSBRV GUI

- 1 At the UNIX command shell prompt, type `setenv DISPLAY clientname:0.0` and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.

- 2 Start the log-in to a Netscape host by typing `/tools/bin/ssh hostname` (e.g., `g0ins02`, `e0ins02`, `l0ins02`, `n0ins02`) at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type `yes` (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key '*<user@localhost>*'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase; go to Step 4.
 - 3 If a prompt to **Enter passphrase for RSA key '*<user@localhost>*'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 5.
 - 4 At the `<user@remotehost>`'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - You are logged in and a UNIX command shell prompt is displayed.
 - 5 Type `netscape` and then press the **Return/Enter** key.
 - The Netscape web browser is displayed.
 - 6 Click in the **Netsite:** field.
 - The field is highlighted.
 - 7 Type the Universal Resource Locator (URL) for the NSBRV GUI and then press the **Return/Enter** key.
 - The NSBRV **Home Page** is displayed, offering access to NSBRV functions (**List Events**, **Manage Subscriptions**, **List Action Queue**, and **List Statistics**) as well as a tab for **Help** in navigating the GUI.
-

Listing Subscribable Events and Subscriptions

Suppose you want to obtain and examine a list of events for which subscriptions may be established, and to find insert events for MOD01 data. Use the following procedure.

Use the NSBRV GUI to List Subscribable Events

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - 2 Click on the **List Events** tab.
 - The **List Events** page is displayed with a table of all ECS events for which a subscription can be created.
 - The column headers in the table are links for sorting the list. There are also buttons for filtering the list.
 - 3 To sort the list by **Event Type**, click on the **Event Type** link.
 - The list is displayed with the events grouped by type; **DELETE** events are listed first, followed by **INSERT** events, and then **UPDATE METADATA** events.
 - *Note:* You can now scroll down to review only **INSERT** events. However, in a long list with all the events included, it may still be cumbersome to locate the events of interest.
 - 4 To filter the list for display of only MOD01 events, click on the **Collection** option button and then scroll and click to select **MOD01**.
 - The selected choice is displayed on the option button.
 - 5 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing only MOD01 events.
-

Suppose that you now want to view subscriptions related to MOD01 data, and then to review detailed information about a particular subscription. To obtain the list you will need to use the NSBRV **Manage Subscriptions** tab, filter on **Collection**, and then select and apply an option to **View** the particular subscription. Use the following procedure.

Use the NSBRV GUI to List and View Subscriptions in the NSBRV Database

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - 2 Click on the **Manage Subscriptions** tab.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NSBRV database.
 - The column headers in the table, except for **Version** and **Event Type**, are links for sorting the list. There are also buttons for filtering the list.
 - 3 To filter the list for display of only MOD01 subscriptions, click on the **Collection** option button and then scroll and click to select **MOD01**.
 - The selected choice is displayed on the option button.
 - 4 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing only MOD01 subscriptions.
 - 5 It may be desirable to filter the list further. For example, if you are looking for a subscription created for a specific user, click on the **User** option button and then scroll and click to select the appropriate User Id.
 - The selected choice is displayed on the option button.
 - 6 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing only subscriptions for the selected Collection and User Id.
 - 7 Scroll if necessary to reach the sought subscription and click on the **View** radio button for that subscription in the last column.
 - The button is filled to indicate selection of the **View** option.
 - 8 Click on the **Apply** button for the subscription.
 - Detailed information for the selected subscription is displayed in a separate window.
-

Adding a Subscription for Data Pool Insert

A user who wants to have data made available for downloading through the Data Pool must contact the DAAC to request that a subscription be placed so that when data of the specified type are inserted in ECS, a copy is inserted in the Data Pool. User Services or Science Data Specialists then create the subscription, adding Data Pool qualification and retention criteria to meet the user's requirement within any constraints imposed for the Data Pool at the DAAC.

Suppose that a registered user requests Data Pool insert for MOD04_L2 003 data, specifying that the data granules inserted during the next two years be kept in the Data Pool for a period of 30 days. The user requests granules from daytime collection, in a geographic area bounded by 0 degrees North Latitude, -50 degrees East Longitude, -20 degrees South Latitude, and -70 degrees West Longitude. The user also requests notification as well as the Data Pool insert. Use the following procedure to create the necessary subscription.

Use the NSBRV GUI to Add a Subscription for Data Pool Insert

- 1** Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - *Note:* At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
- 2** Click on the **Manage Subscriptions** tab.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NSBRV database.
- 3** Click on the **Add Subscriptions** tab.
 - The **Add Subscriptions** page is displayed.
- 4** Click in the **User Id** field.
 - The cursor is displayed in the **User Id** field.
- 5** Type the User Id for the requesting user.
 - *Note:* The entered User Id must be a valid registered user (i.e., must be listed in the User Profile database).
 - The typed entry is displayed in the **User Id** field.
- 6** If it is necessary to set the subscription status (typically, it is left at the **Active** default setting), click on the **Status** option button and click on the desired choice (**Active** or **Inactive**).
 - The selected choice is displayed on the option button.
- 7** If it is necessary to set the **Expiration Date** (normally defaulted to one year from the current date; for this exercise, the user requested a two-year subscription), click at the end of the **Expiration Date** field and backspace to delete the default information.
 - The cursor is displayed in the **Expiration Date** field.
- 8** Type an appropriate expiration date (in this case, two years from the current date) in the format **mm/dd/yyyy**.
 - The typed entry is displayed in the **Expiration Date** field.

- 9 Click in the **ESDT Short Name** field.
 - The cursor is displayed in the **ESDT Short Name** field.
- 10 Type the first few characters of the name of the collection for which the subscription is to be created (for this exercise, type **MOD04**).
 - The typed entry is displayed in the **ESDT Short Name** field.
- 11 Click on the **Apply** button.
 - A **SELECT Short Name/Version/Event Type** option button is displayed, along with an **Apply** button.
- 12 Click on the **SELECT Short Name/Version/Event Type** option button and then drag the cursor to select the event for which the subscription is to be created.
 - The selected choice is displayed on the option button.
- 13 Click on the **Apply** button.
 - A block of option buttons and fields is displayed to permit selection of **Attribute Name/Type** and entry of **Min Value** and **Max Value** for any valid **Integer/Float/Date** qualifiers, string **Value** qualifiers, and **Latitude** and **Longitude** coordinates to define a bounding rectangle spatial qualifier for the subscription to be created. It may be necessary to use a scroll bar to reveal all qualifier entry fields.
 - Scrolling also reveals three buttons for selection of one or more **Actions** and a block with option buttons, fields, and links for defining the selected action(s) to be taken upon occurrence of the event for which the subscription is to be created.
 - At the bottom, there is an **Add Subscription** button for submitting the subscription.
- 14 Click on an option button for **Integer/Float/Date** qualifiers and then scroll (if necessary) and click to select an **Attribute Name/Type** for which a qualifier is to be defined.
 - The selected choice is displayed on the option button.
 - *Note:* If the operator selects an attribute that is associated with a measured parameter that can be specified, a pop-up window appears with an entry field and a prompt to **Enter Parameter Name:**. It is necessary to enter a valid parameter name (i.e., one with which the attribute is associated in the Science Data Server); type the name and click on the **OK** button in the pop-up window. For the first delivery of the NSBRV, the attribute **QAPercentCloudCover**, available for some data types, is the only attribute that requires this entry.
- 15 Click in the **Min Value** field to the right of the option button for the specified **Attribute Name/Type**.
 - The cursor is displayed in the field.

- 16 Type the minimum value for the qualifier.
 - The typed entry is displayed in the field.
- 17 Click in the **Max Value** field to the right of the just-completed **Min Value** field.
 - The cursor is displayed in the field.
- 18 Type the maximum value for the qualifier.
 - The typed entry is displayed in the field.
- 19 Repeat Steps 14 - 18 for any additional **Integer/Float/Date** qualifiers to be entered.
- 20 Click on an option button for **String** qualifiers and then scroll (if necessary) and click to select an **Attribute Name/Type** for which a qualifier is to be defined.
 - The selected choice is displayed on the option button.
- 21 Click in the **Value** field to the right of the option button for the specified **Attribute Name/Type**.
 - The cursor is displayed in the field.
- 22 Type the string value for the qualifier.
 - The typed entry is displayed in the field.
- 23 Repeat Steps 20 - 22 for any additional **String** qualifiers to be entered.
- 24 Click in the **North Latitude** field.
 - The cursor is displayed in the field.
- 25 Type the **North Latitude** coordinate for any bounding rectangle to be specified (for this exercise, type **0**).
 - The typed entry is displayed in the field.
- 26 Click in the **East Longitude** field.
 - The cursor is displayed in the field.
- 27 Type the **East Longitude** coordinate for any bounding rectangle to be specified (for this exercise, type **-50**).
 - The typed entry is displayed in the field.
- 28 Click in the **South Latitude** field.
 - The cursor is displayed in the field.

29 Type the **South Latitude** coordinate for any bounding rectangle to be specified (for this exercise, type **-20**).

- The typed entry is displayed in the field.

30 Click in the **West Longitude** field.

- The cursor is displayed in the field.

31 Type the **West Longitude** coordinate for any bounding rectangle to be specified (for this exercise, type **-70**).

- The typed entry is displayed in the field.

Note: Every subscription must have at least one action specified and may have more than one. For a Data Pool Insert subscription, the operator must click the **Data Pool** action selection button and enter data in the **Data Pool Information** portion of the **Actions** block.

32 Click the **Data Pool** action selection button and the **E-Mail Notification** action selection button.

- Each button appearance changes to depressed to indicate its selection as it is clicked.

33 Click in the **Retention Period** field in the **Data Pool Information** portion of the **Actions** block.

- The cursor is displayed in the field.

34 Type the desired retention period (within any Data Pool constraints imposed by the DAAC) (in this case, type **30**).

- The typed entry is displayed in the field.

35 Click in the **Retention Priority** field in the **Data Pool Information** portion of the **Actions** block.

- The cursor is displayed in the field.

36 Type the desired priority (in this case, leave the default value).

- The typed entry is displayed in the field.

37 Click on the **Science Granules and/or Metadata** option button in the **Data Pool Information** portion of the **Actions** block and click to select **science and metadata** (if the Data Pool insert is to include both the science granule and its metadata) or **metadata only** (if the insert is to be metadata only -- for example, if the data have an associated cost that must be handled with a billing and accounting function). (For this exercise, select **science and metadata**).

- The selected choice is displayed on the button.

- 38 If the granules to be added to the Data Pool as a result of this subscription are *not* to be associated with a theme, go to Step 41; otherwise proceed with Step 39.
 - 39 If the granules to be added to the Data Pool as a result of this subscription are to be associated with a theme, click in the **Check here to add theme:** checkbox.
 - The check box indicates checked status.
 - 40 Click in the **Enter first few chars of name:** text entry field and type the first three or four characters of the desired theme.
 - The typed entry is displayed in the field.
 - 41 If (as in this exercise) the user wants notification, examine the **Action Address** field in the **E-Mail Notification** portion of the **Actions** block.
 - The user's E-Mail address from the User Profile database is displayed in the field.
 - 42 Click in the **User String** field in the **E-Mail Notification** portion of the **Actions** block.
 - The cursor is displayed in the field.
 - 43 Type a secondary qualifier string to distinguish this request from others by users with the same user profile. (*Note:* This step is optional.)
 - The typed entry is displayed in the field.
 - 44 Click on the **Metadata** option button in the **E-Mail Notification** portion of the **Actions** block and click on **Qualifying Metadata Only** or **All Metadata** to indicate whether only qualifying metadata or all metadata are to be included in the email notification.
 - The selected choice is displayed on the option button.
 - 45 Click on the **Add Subscription** button.
 - A message is displayed confirming that the subscription was added to the database and buttons permit **Add another subscription** or **Return to Home Page**.
-

Using NSBRV GUI for Creating a Subscription with Acquire

The Spatial Subscription Server was designed to replace the Subscription Server originally deployed as part of ECS. Accordingly, it offers capabilities parallel to those of the original ECS Subscription Server. Suppose that a registered user, Dr. L. Abuser has used the ASTER DAR Tool to submit a request for ASTER expedited data, and contacts you with a request to acquire the data via FTP push to a specific disk directory as soon as the data are received at the archive. The relevant data for the necessary subscription are:

- User ID: <*UserID*>.

- Email Address: <UserID>@<site>.com.
- Start Date: (Enter today's date, in format mm/dd/yyyy).
- Expiration Date: 12/31/2001.
- Event: AST_EXP INSERT.
- Event Name: AST_EXP 001 INSERT.
- Acquire: ftp push
 - User Name: <UserID>
 - User Password: *****
 - Host Name: <host>
 - Destination: /<path>
- Qualifiers: ASTER DAR ID 123456789

The following procedure can be used to create the necessary subscription.

Use the NSBRV GUI to Create a Standard Subscription for Distribution/Notification

- 1** Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - **Note:** At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
- 2** Click on the **Manage Subscriptions** tab.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NSBRV database.
- 3** Click on the **Add Subscriptions** tab.
 - The **Add Subscriptions** page is displayed.
- 4** Click in the **User Id** field.
 - The cursor is displayed in the **User Id** field.
- 5** Type the User Id for the requesting user.
 - The typed entry is displayed in the **User Id** field.
- 6** If it is necessary to set the subscription status (typically, it is left at the **Active** default setting), click on the **Status** option button and click on the desired choice (**Active** or **Inactive**).
 - The selected choice is displayed on the option button.

- 7 If it is necessary to set the **Expiration Date** (normally defaulted to one year from the current date; for this exercise, the user requested the subscription for a single event set to occur by the end of the current year), click at the end of the **Expiration Date** field and backspace to delete the default information.
 - The cursor is displayed in the **Expiration Date** field.
- 8 Type an appropriate expiration date (in this case, **12/31/2001**) in the format **mm/dd/yyyy**.
 - The typed entry is displayed in the **Expiration Date** field.
- 9 Click in the **ESDT Short Name** field.
 - The cursor is displayed in the **ESDT Short Name** field.
- 10 Type the first few characters of the name of the collection for which the subscription is to be created (for this exercise, type **AST_EXP**).
 - The typed entry is displayed in the **ESDT Short Name** field.
- 11 Click on the **Apply** button.
 - A **SELECT Short Name/Version/Event Type** option button is displayed, along with an **Apply** button.
- 12 Click on the **SELECT Short Name/Version/Event Type** option button and then drag the cursor to select the event for which the subscription is to be created (**AST_EXP 001 INSERT**).
 - The selected choice is displayed on the option button.
- 13 Click on the **Apply** button.
 - A block of option buttons and fields is displayed to permit selection of **Attribute Name/Type** and entry of **Min Value** and **Max Value** for **Integer/Float/Date** qualifiers, string **Value** qualifiers, and **Latitude** and **Longitude** coordinates to define a bounding rectangle spatial qualifier for the subscription to be created. It may be necessary to use a scroll bar to reveal all qualifier entry fields.
 - Scrolling also reveals an **Actions** block with option buttons, fields, and links for defining one or more actions to be taken upon occurrence of the event for which the subscription is to be created.
 - At the bottom, there is an **Add Subscription** button for submitting the subscription.
- 14 Click on an option button for **String** qualifiers and then scroll (if necessary) and click to select an **Attribute Name/Type** for which a qualifier is to be defined (for this exercise, select **APID_1 varchar**).
 - The selected choice is displayed on the option button.

15 Click in the **Value** field to the right of the option button for the specified **Attribute Name/Type**.

- The cursor is displayed in the field.

16 Type the string value for the qualifier (in this case, type **123456789**).

- The typed entry is displayed in the field.

17 To specify that the subscription is to have an **Acquire** action, click on the **Acquire** action selection button.

- The button appearance changes to depressed to indicate its selection.

18 Click on the **User String** field in the **Acquire Information** portion of the **Actions** block.

- The cursor is displayed in the field.
- *Note:* The **User Profile** field and **Email Address** field are already filled in with information from the user profile database.

19 Type a secondary qualifier string to distinguish this request from others by users with the same user profile. (*Note:* This step is optional.)

- The typed entry is displayed in the field.

20 Click on the **Media Type** option button and select the media type for the distribution. (For this exercise, because the user specified **FtpPush**, the default, no selection is necessary.)

- The selected choice is displayed on the option button.

21 Click on the **Priority** option button and select the priority for the acquire. (For this exercise, the user requested ASTER expedited data; it is appropriate to specify **VHIGH**. The default is set from the highest privilege in the User Profile database, which is **VHIGH** in this case. Therefore, no selection is necessary.)

- The selected choice is displayed on the option button.

Note: Steps 22 - 31 are to be performed only if the **Media Type** selected in Step 20 was **FtpPush** (as in this exercise).

22 Click in the **FTP User** field.

- The cursor is displayed in the field.

23 Type the UNIX log in for the requesting user on the destination system for the push.

- The typed entry is displayed in the field.

24 Click in the **FTP Password** field.

- The cursor is displayed in the field.

- 25 Type the UNIX password for the requesting user on the destination system for the push.
 - Asterisks are displayed in the field.
 - 26 Click in the **Enter password again for verification** field.
 - The cursor is displayed in the field.
 - 27 Type the UNIX password for the requesting user on the destination system for the push.
 - Asterisks are displayed in the field.
 - 28 Click in the **FTP Host** field.
 - The cursor is displayed in the field.
 - 29 Type the UNIX host name for the destination system for the push.
 - The typed entry is displayed in the field.
 - 30 Click in the **FTP Directory** field.
 - The cursor is displayed in the field.
 - 31 Type the pathname of the UNIX directory on the destination system where the acquired files are to be stored.
 - The typed entry is displayed in the field.
 - 32 Click on the **Add Subscription** button.
 - A message is displayed confirming that the subscription was added to the database and buttons permit **Add another subscription** or **Return to Home Page**.
-

Working with Existing Subscriptions

On occasion, it may be necessary to modify or delete existing subscriptions in the NSBRV database. The NSBRV GUI web access supports these requirements.

It may become desirable to extend the period of retention in a Data Pool insert subscription. For example, if conditions arise that increase user interest in the data that will be inserted as a result of the subscription, keeping the data in the Data Pool longer is a way to be responsive to that user interest. Such conditions might be unusual weather activity, flooding, volcanic activity, or other events in the area covered by the subscription. Suppose that Dr. L. Abuser contacts User Services with a request that, for the remainder of the two-year period of the Data Pool insert subscription you placed in response to the original request, the data placed in the data pool be kept for 60 days instead of 30. Use the following procedure to extend the retention period.

Use the NSBRV GUI to Extend the Period of Retention in a Data Pool Insert Subscription

- 1** Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - *Note:* At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
 - 2** Click on the **Manage Subscriptions** tab.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NSBRV database.
 - 3** Click on the **User** option button and then scroll and click to select the appropriate User Id.
 - The selected choice is displayed on the option button.
 - 4** Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing only subscriptions for the selected User Id.
 - 5** Scroll if necessary to reach the sought subscription and click on the **Update** radio button for that subscription in the last column.
 - The button is filled to indicate selection of the **Update** option.
 - 6** Click on the **Apply** button for the subscription.
 - A page for the subscription is displayed with a block of option buttons and fields to permit updating qualifiers, **Latitude** and **Longitude** coordinates, and **Actions** information. It may be necessary to use a scroll bar to reveal all entry areas.
 - At the bottom, there is an **Update Subscription** button for submitting the changes.
 - 7** To change the retention period, click at the end of the **Retention Period** field in the **Data Pool Information** portion of the **Actions** block and backspace to delete the displayed number (for this exercise, **30**).
 - The cursor is displayed in the field.
 - 8** Type the desired extended retention period (within any Data Pool constraints imposed by the DAAC) (in this case, type **60**).
 - The typed entry is displayed in the field.
 - 9** Click on the **Update Subscription** button.
 - A message is displayed confirming that the subscription was updated and buttons permit **Add another subscription** or **Return to Home Page**.
-

The update procedure for extending the period of retention in a Data Pool insert overlaps extensively with procedures for updating other information in an existing subscription, either for Data Pool insert (for example, to change qualifiers or to associate the subscription with a theme) or for notification/distribution of standard ECS products (for example, to change the distribution media type or other information defining the distribution). The operator accesses the subscription in the same way, makes the necessary inputs to specify the changes, and uses the **Update Subscription** button to submit the changes.

If it is necessary to delete (cancel) a subscription, the NSBRV GUI provides the means. Suppose Dr. L. Abuser contacts User Services with a request to cancel the subscription for ASTER expedited data. Use the following procedure to respond to that request.

Use the NSBRV GUI to Delete (Cancel) a Subscription in the NSBRV Database

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - *Note:* At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
 - 2 Click on the **Manage Subscriptions** tab.
 - The **Manage Subscriptions** page is displayed with a table listing all subscriptions in the NSBRV database.
 - 3 Click on the **User** option button and then scroll and click to select the appropriate User Id.
 - The selected choice is displayed on the option button.
 - 4 Click on the **Filter** button to implement the selected filter.
 - A list is displayed showing only subscriptions for the selected User Id.
 - 5 Scroll if necessary to reach the sought subscription and click on the **Delete** radio button for that subscription in the last column.
 - The button is filled to indicate selection of the **Delete** option.
 - 6 Click on the **Apply** button for the subscription.
 - A confirmation screen is displayed; a message **Are you sure that you want to delete the subscription?** appears above two buttons, one labeled **Yes** and one labeled **No**.
 - 7 Click on the **Yes** button.
 - A message is displayed confirming that the subscription was deleted from the database and buttons permit **Delete another subscription** or **Return to Home Page**.
-

Using the NSBRV GUI to Manage Bundling Orders

The NSBRV GUI is used to list, view, create, update, cancel, and list associated subscriptions for bundling orders. These functions are accessible through the **Manage Bundling Orders** tab. The following procedures are applicable.

Use the NSBRV GUI to Obtain a List of Bundling Orders and View a Bundling Order

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - *Note:* At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
 - 2 Click on the **Manage Bundling Orders** tab.
 - The **Manage Bundling Orders** page is displayed with a table listing all bundling orders in the NSBRV database, providing for each a **Bundling Order ID**, the **User ID** of the person who created the bundling order, the **Creation Date**, **Expiration Date**, **Media Type**, and **Status** of the bundling order. The column headers for these data are links for sorting the list on the information in the column.
 - The page also provides for each bundling order the options to **View**, **Update**, **Cancel**, and **List Subs**, with an **Apply** button to implement the selected option.
 - 3 To list the subscriptions associated with a bundling order, click on the radio button next to **List Subs** in the **Choose Bundling Order Action** at the end of the row for the bundling order.
 - The radio button is filled to indicate selection.
 - 4 To implement the selected action, click on the **Apply** button at the end of the row.
 - The GUI displays a page listing the subscriptions associated with the selected bundling order, providing for each associated subscription the information identified in step 2.
 - 5 Scroll if necessary to reach the sought bundling order and click on the **View** radio button for that bundling order in the last column.
 - The button is filled to indicate selection of the **View** option.
 - 6 Click on the **Apply** button at the end of the row for the bundling order.
 - Detailed information is displayed for the selected bundling order.
-

To cancel a bundling order, use the following procedure.

Use the NSBRV GUI to Cancel a Bundling Order and Its Associated Subscriptions

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - **Note:** At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
 - 2 Click on the **Manage Bundling Orders** tab.
 - The **Manage Bundling Orders** page is displayed with a table listing all bundling orders in the NSBRV database, providing for each a **Bundling Order ID**, the **User ID** of the person who created the bundling order, the **Creation Date**, **Expiration Date**, **Media Type**, and **Status** of the bundling order. The column headers for these data are links for sorting the list on the information in the column.
 - The page also provides for each bundling order the options to **View**, **Update**, **Cancel**, and **List Subs**, with an **Apply** button to implement the selected option.
 - 3 To cancel a bundling order, click on the radio button next to **Cancel** in the **Choose Bundling Order Action** at the end of the row for the bundling order to be canceled.
 - The radio button is filled to indicate selection.
 - 4 To implement the selected action, click on the **Apply** button at the end of the row.
 - A confirmation message asks **Are you sure that you want to cancel the bundling order? Any associated subscriptions will be simultaneously canceled..**
 - 5 Click on the **Yes** button.
 - The GUI displays a confirmation that **Bundling Order <nnnnnn> was canceled.**
-

To add a bundling order, use the following procedure.

Use the NSBRV GUI to Add a Bundling Order

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - **Note:** At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.

- 2 Click on the **Manage Bundling Orders** tab.
 - The **Manage Bundling Orders** page is displayed with a table listing all bundling orders in the NSBRV database, providing for each a **Bundling Order ID**, the **User ID** of the person who created the bundling order, the **Creation Date**, **Expiration Date**, **Media Type**, and **Status** of the bundling order. The column headers for these data are links for sorting the list on the information in the column.
 - The page also provides for each bundling order the options to **View**, **Update**, **Cancel**, and **List Subs**, with an **Apply** button to implement the selected option.
- 3 Click on the **Add Bundling Order** link.
 - The GUI displays the **Add Bundling Order** page.
- 4 Click in the **User ID** field to place the cursor in the field.
 - The cursor is displayed in the **User ID** field.
- 5 Type your **User ID**.
 - The typed entry is displayed in the **User ID** field.
- 6 If it is necessary or desirable to change the displayed default **Expiration Date**, click in the **Expiration Date** field and change to the desired date, either by dragging the cursor to highlight the current value and typing over it or by backspacing to delete the current value and typing the desired date.
 - The desired date is displayed in the **Expiration Date** field.
- 7 Click on the **Media Type** option button to display the **Media Type** options and click on the desired option to select it.
 - The desired **Media Type** option is displayed on the option button.
- 8 Click on the **continue** button.
 - A confirmation dialog box asks **Your present values have been entered. Continue?**

- 9 Click on the **OK** button in the confirmation dialog box.
 - The GUI displays a data page appropriate for the selected **Media Type**.
 - For hard media, the page provides fields to specify shipping information.
 - For FTP Push, the page provides fields to specify FTP Push parameters.
 - For FTP Pull, the page does not require media parameters.
 - The displayed data page contains fields to specify an **Email Address** and any additional **User String**. It also provides an option button to select a **Distribution Priority** (**VHIGH, HIGH, NORMAL, LOW, or XPRESS**).
 - The displayed data page provides fields to specify completion criteria for a bundle (with defaults appropriate to the selected **Media Type**).
 - Minimum Bundle Size (GB).
 - Minimum Granule Count.
 - Maximum Bundle Age (days).
 - 10 For each required field (identified on the GUI by an asterisk) and each field where a change is desirable, click in the field and change to the desired entry. This may entail typing a value in a blank field or changing a default, either by dragging the cursor to highlight the current value and typing over it or by backspacing to delete the current value and typing the desired value.
 - The fields display entered and/or desired values.
 - 11 Click on the **Add Bundling Order** button.
 - The GUI displays a confirmation that **Bundling Order <nnnnnn> was created**.
-

Use the following procedure to update a bundling order.

Use the NSBRV GUI to Update a Bundling Order

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - **Note:** At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.
- 2 Click on the **Manage Bundling Orders** tab.
 - The **Manage Bundling Orders** page is displayed with a table listing all bundling orders in the NSBRV database, providing for each a **Bundling Order ID**, the **User ID**

of the person who created the bundling order, the **Creation Date**, **Expiration Date**, **Media Type**, and **Status** of the bundling order. The column headers for these data are links for sorting the list on the information in the column.

- The page also provides for each bundling order the options to **View**, **Update**, **Cancel**, and **List Subs**, with an **Apply** button to implement the selected option.
- 3 To update a bundling order, click on the radio button next to **Update** in the **Choose Bundling Order Action** at the end of the row for the bundling order.
 - The radio button is filled to indicate selection.
 - 4 To implement the selected action, click on the **Apply** button at the end of the row.
 - The GUI displays the **Update Bundling Order <nnnnnn>** page, showing the **User Id**, **Expiration Date**, and **Media Type**.
 - 5 If it is necessary or desirable to update the **Expiration Date**, click in the **Expiration Date** field and change to the desired date, either by dragging the cursor to highlight the current value and typing over it or by backspacing to delete the current value and typing the desired date.
 - The desired date is displayed in the **Expiration Date** field.
 - 6 If it is necessary or desirable to change the media type, click on the **Media Type** option button to display the **Media Type** options and click on the desired option to select it.
 - The desired **Media Type** option is displayed on the option button.
 - 7 Click on the **Update Bundling Order** button.
 - A confirmation dialog box asks **Your present values have been entered. Continue?**

- 8 Click on the **OK** button in the confirmation dialog box.
 - The GUI displays a data page appropriate for the selected **Media Type**.
 - For hard media, the page provides fields to specify shipping information.
 - For FTP Push, the page provides fields to specify FTP Push parameters.
 - For FTP Pull, the page does not require media parameters.
 - 9 The displayed data page contains fields to specify an **Email Address** and any additional **User String**. It also provides an option button to select a **Distribution Priority** (**VHIGH**, **HIGH**, **NORMAL**, **LOW**, or **XPRESS**).
 - The displayed data page provides fields to specify completion criteria for a bundle (with defaults appropriate to the selected **Media Type**).
 - Minimum Bundle Size (GB).
 - Minimum Granule Count.
 - Maximum Bundle Age (days).
 - 10 For each required field (identified on the GUI by an asterisk) and each field where a change is desirable, click in the field and change to the desired entry. This may entail typing a value in a blank field or changing a default, either by dragging the cursor to highlight the current value and typing over it or by backspacing to delete the current value and typing the desired value.
 - The fields display entered and/or desired values.
 - 11 Click on the **Update Bundling Order** button.
 - The GUI displays a confirmation that **Bundling Order <nnnnnn> was successfully updated**.
-

Use the following procedure to configure bundling order completion criteria default values.

Using the NSBRV GUI to Configure Bundling Order Completion Criteria Default Values

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - **Note:** At various points in this procedure, you may encounter a security information warning. Unless you know of a specific potential danger that you must avoid, click on the **Continue submission** button when this warning is displayed.

- 2 Click on the **Manage Bundling Orders** tab.
 - The **Manage Bundling Orders** page is displayed with a table listing all bundling orders in the NSBRV database, providing for each a **Bundling Order ID**, the **User ID** of the person who created the bundling order, the **Creation Date**, **Expiration Date**, **Media Type**, and **Status** of the bundling order. The column headers for these data are links for sorting the list on the information in the column.
 - The page also provides for each bundling order the options to **View**, **Update**, **Cancel**, and **List Subs**, with an **Apply** button to implement the selected option.
 - 3 Click on the **Configure Defaults** link.
 - The **Configure Completion Criteria Default Values** page is displayed.
 - 4 Click in the **Change to . . .** entry field for any configuration parameter to be changed.
 - The cursor is displayed in the entry field.
 - 5 Type the desired new value for the selected parameter.
 - The typed entry is displayed in the field.
 - 6 Repeat steps 4 and 5 for any additional parameters to be changed.
 - 7 Click on the **Change Bundling Criteria** button at the bottom of the page.
 - A dialog box requests **Please Confirm The Following Bundling Criteria Change** and lists any parameter(s) for which changes were entered, with the entered value(s).
 - 8 Click on the **OK** button in the dialog box.
 - The dialog box is closed and the **Current Value** column on the **Configure Completion Criteria Default Values** page reflects the change(s).
-

Using the NSBRV GUI for Monitoring the Spatial Subscription Server

The NSBRV GUI provides pages that can be used to keep track of current actions as the NSBRV processes Acquires and Notifications, and to track NSBRV performance. These capabilities are accessible through tabs on the NSBRV **Home Page**.

The **List Action Queue** tab is used to view Acquire and Notification actions being processed by the NSBRV. The following procedure is applicable.

Use the NSBRV GUI to View the Acquire and Notification Actions Being Processed

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
- 2 Click on the **List Action Queue** tab.
 - The **List Action Queue** information is displayed in a table listing acquire and notification actions that are being processed. On this page, the **Action Type** and **Subscription Id** column headers are links for sorting the list, and there are also **Action Type**, **Subscription**, and **Status** option buttons and a filter button for filtering the list.

The **List Statistics** tab is used to review summary information concerning the processing of events and subscriptions. The following procedure is applicable.

Use the NSBRV GUI to View Statistics on Processing of Events and Actions by the NSBRV

- 1 Launch the NSBRV GUI (refer to procedure **Launch the NSBRV GUI**, previous section of this lesson).
 - 2 Click on the **List Statistics** tab.
 - The **List Statistics** information is displayed, showing **Subscription Events Left to Dequeue**, **Actions Left to Dequeue**, a **Summary of the Processing Time for Subscriptions Evaluated against Events in the Event Queue**, a **Summary of the Processing Time for E-Mail Notification Actions in Action Queue**, and a **Summary of the Processing Time for Distribution Actions in Action Queue**.
-

Troubleshooting Spatial Subscription Server Problems

The Spatial Subscription Server is implemented through Perl scripts, and uses Sybase database functions. If the tool cannot be launched, or does not function (e.g., cannot accept subscriptions), you will need to ask the System Administrator to ensure that the appropriate scripts are functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the tool while it is apparently functioning normally. Error messages associated with the Spatial Subscription Server tool are listed in Appendix A of the *Operations Tools Manual* (Document 609-CD-610-003, Table A.2.10-1). Table 3 is taken from the corresponding table in Document 609. If a problem cannot be identified and fixed without help within a reasonable period of time, the appropriate response is to call the help desk or submit a trouble ticket in accordance with site Problem Management policy.

Table 3. Spatial Subscription Server GUI User Messages

Message Text	Impact	Cause and Corrective Action
No subscription choice was selected, click on View, Update, or Delete.	No action taken on the subscription.	The user clicked 'Apply' for a subscription without specifying an action (view, update or delete). Return to previous page and select an action.
User Profile Validation Failure. User "" is unknown.	Subscription not added/updated.	The user attempted to add/update a subscription without specifying a userId. Return to previous page and enter a valid userId.
Datetime String Validation Failure	Subscription not added/updated.	The user entered an invalid datetime string. Return to previous page and enter a valid datetime string.
ESDT Pattern Error	Subscription not added.	The user entered an invalid pattern for an ESDT short name. Return to previous page and enter a valid pattern (or leave blank to see all possible ESDTs).
Subscription NOT added. The following input errors were detected: <description of the error>	Subscription not added/updated.	Invalid data was entered for a subscription and detected by Sybase when an insert into the database was attempted. (For example, alpha data entered for a numeric field). Return to previous page and correct the data entry described in the detailed error message.
No actions were entered for the subscription.	Subscription not added/updated.	A subscription must have at least one associated action. Return to previous page and select at least one action by checking the checkbox for that action and entering the required data.

Table 3. Spatial Subscription Server GUI User Messages (Cont.)

Message Text	Impact	Cause and Corrective Action
Cannot mix bundling with other types of actions	Subscription not added/updated.	If a subscription is bundled, it cannot have any other associated actions. Return to previous page and either unbundle the subscription or uncheck any other checked actions.
All the mandatory acquire data for FtpPush (Pull) was not entered	Subscription not added/updated.	Required information was not entered for an acquire action (e.g., FTP password for a push operation). Return to previous page and enter all requested information.
All the mandatory E-Mail Notification data was not entered	Subscription not added/updated.	Required information was not entered for an email notification action. Return to previous page and enter all requested information.
All the mandatory Data Pool data was not entered	Subscription not added/updated.	Required information was not entered for a data pool action. Return to previous page and enter all requested information.
No option was selected, click on Suspend All, Resume All or Cancel All	No action taken on subscriptions.	No action was specified to apply to the subscriptions associated with a theme. Return to the previous page and select an option.
"userId" must have a value	Bundling order not added/updated.	UserId was not specified for a bundling order. Return to the previous page and enter a valid userId.
User Profile Validation Failure: User <> is Unknown.	Bundling order not added/updated.	An invalid userId has been specified for a bundling order. Return to the previous page and enter a valid userId.
Date format invalid. Please enter MM/DD/YYYY.	Bundling order not added/updated.	An invalid datetime has been entered for the bundling order expiration date. Return to the previous page and enter a valid datetime string.
<> must have a value	Bundling order not added/updated.	A required field has not been entered for a bundling order. (For example, street address for a physical media distribution.) Return to the previous page and enter the required information.
<> must be an integer	Bundling order not added/updated or completion criteria defaults not configured.	A non-numeric value was entered for one or more completion criteria. Return to the previous page and enter only numeric values for completion criteria.

Guidelines for Selecting Data for Data Pool Insertion

Because the intended use of the Data Pool is to facilitate access to current data or frequently used data, criteria must be established (and refined with experience) for inclusion. In addition, although large, the Data Pool storage capacity is finite. As the Data Pool volume approaches capacity, it is likely to be necessary to impose selection criteria for guidance in populating the Data Pool. Factors governing selection and retention of data for the Data Pool include:

- **Serving user needs:** It is intended that requests for Data Pool insert subscriptions to meet diverse needs of science and applications users will be a major factor in the selection of data for Data Pool insertion.
 - Federal, State, and Regional Government (e.g., inventorying, mapping, resource management, environmental monitoring).
 - Earth and social science research.
 - Education (e.g., earth and social sciences instruction and outreach by universities, schools, industry, and community agencies).
 - Intermediaries (e.g., provision of value-added services, hardware, and software by libraries, information centers, and data and information service companies).
 - Commercial (e.g., energy exploration and production, utilities, agriculture/agribusiness, forest management, manufacturing and processing, environmental management and restoration, media, shipping, weather information, and other business planning and operations).
- **Balancing variety in data offered vs. persistence of need:** It may be generally desirable to have the Data Pool populated with a variety of data to serve a broad interest, but it may be necessary to match retention periods for specific data sets to anticipated usage patterns.
 - Data variety ensures ready availability of useful data to serve diverse interests.
 - Optimal window of retention for a data set should reflect its use (e.g., data of interest primarily to the applications community may have its utility age more slowly than will data of interest primarily to the science community). Accordingly, for many data products, the science community may be able to tolerate a shorter window of retention, such as 30 days, whereas the applications community may benefit from having data products available for 3 months or more. This may vary by DAAC, depending on anticipated demand for different data sets by the science and applications communities.

- Data Type exclusion: A DAAC may elect to exclude certain data types from the Data Pool.
 - Products of known limited interest (e.g., on-demand products).
 - Products requiring billing and accounting (e.g., Landsat-7); to facilitate user search, these products may be represented in the Data Pool with metadata only.
- Data quality selectivity: A DAAC may elect to use QA Flag qualifiers to permit Data Pool insertion only for granules that meet certain quality standards.
- Reducing demand on ECS Data Distribution: It may be desirable for DAAC operators to establish a Data Pool insert subscription for data predicted or observed to be of high interest, thereby reducing the load on Data Distribution.
- In any event, DAACs should consider setting up initial criteria, monitoring data pool usage, and refining the criteria over time. The refinement process should be iterative in nature, allow for a phased expansion of input information on user needs, and include indicators for tracking level and nature of use.

Data Pool User Web Access

User access to the Data Pool is through a web browser and download by FTP. There are two ways the user may access the Data Pool using a web browser: (1) access by a Data Pool Web Access Drill Down Tool, and (2) through the EDG during a data search. The Web Access Drill Down Tool provides users with a rapid means to obtain granules with associated metadata and any available browse granules. The interface allows a user to select a Data Group and successively select constraints in a progressive narrowing of the search to drill down to desired granules. User Services must be familiar with the tool and able to provide user assistance and support. Figure 36 shows the welcome screen of the Data Pool web access home page. This page briefly describes the Data Pool and provides various links for access to further information (e.g., **About Data Pool, About the DAAC, Release Notes**). It also contains links to enable a user to start searching the Data Pool, either by **Data Group** or by **Theme**. During a search, a user may elect to use the bookmark function of Netscape (or other browser) to mark a point in the search to be returned to at a later time. It should be noted that the bookmark saves search criteria, and when the bookmark is used to resume searching, a new search is done with those criteria. Therefore, a user may note slightly different results in the second search (e.g., if new granules were added to the Data Pool after the first search).

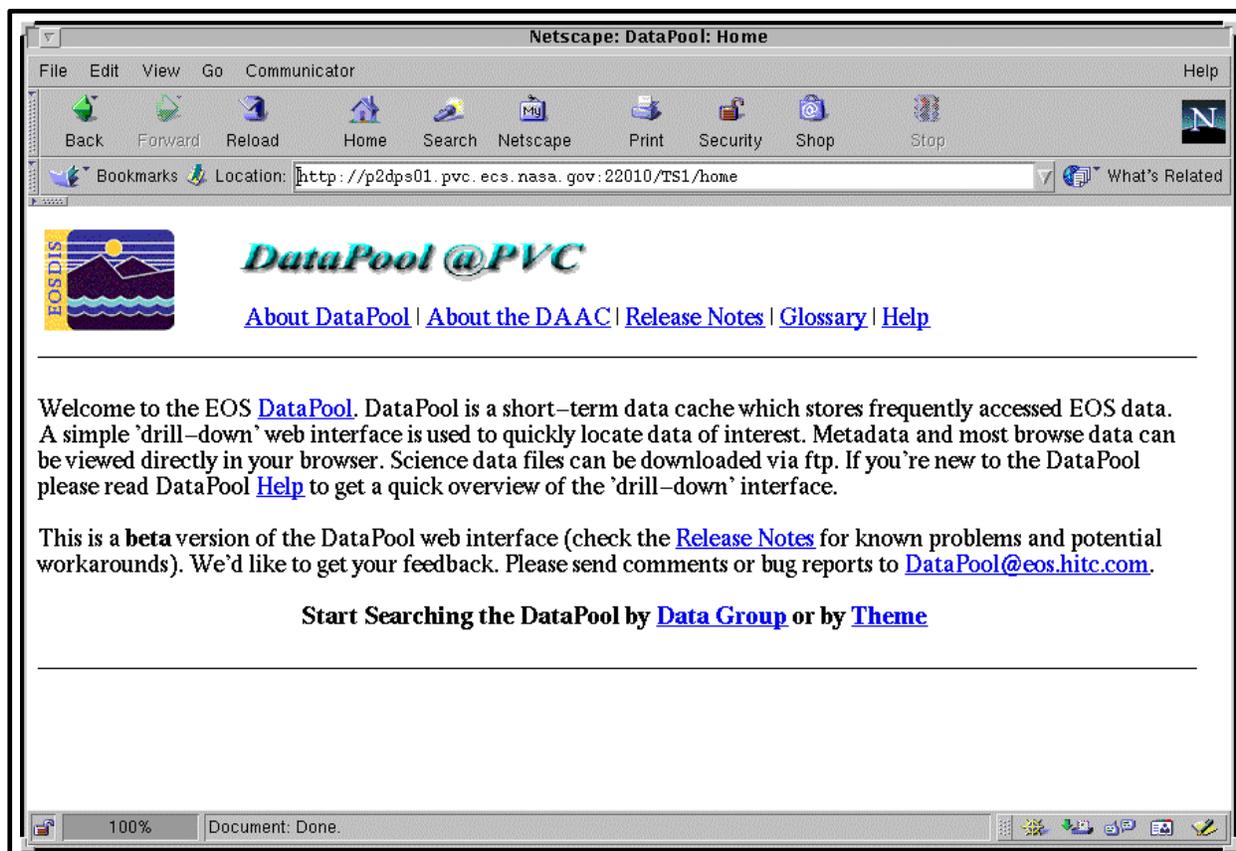


Figure 36. Data Pool Web Access: Welcome Screen

Figure 37 shows one of the first selection screens of the Data Pool web access interface, obtained if the user elects to start searching the Data Pool by **Theme** (selecting that link from the screen shown in Figure 36). This page permits selection of a theme of interest. It lists the available themes with a brief description of each and the number of granules related to that theme in the Data Pool. There is also a link permitting the user to begin searching by **Data Group** instead of by theme.

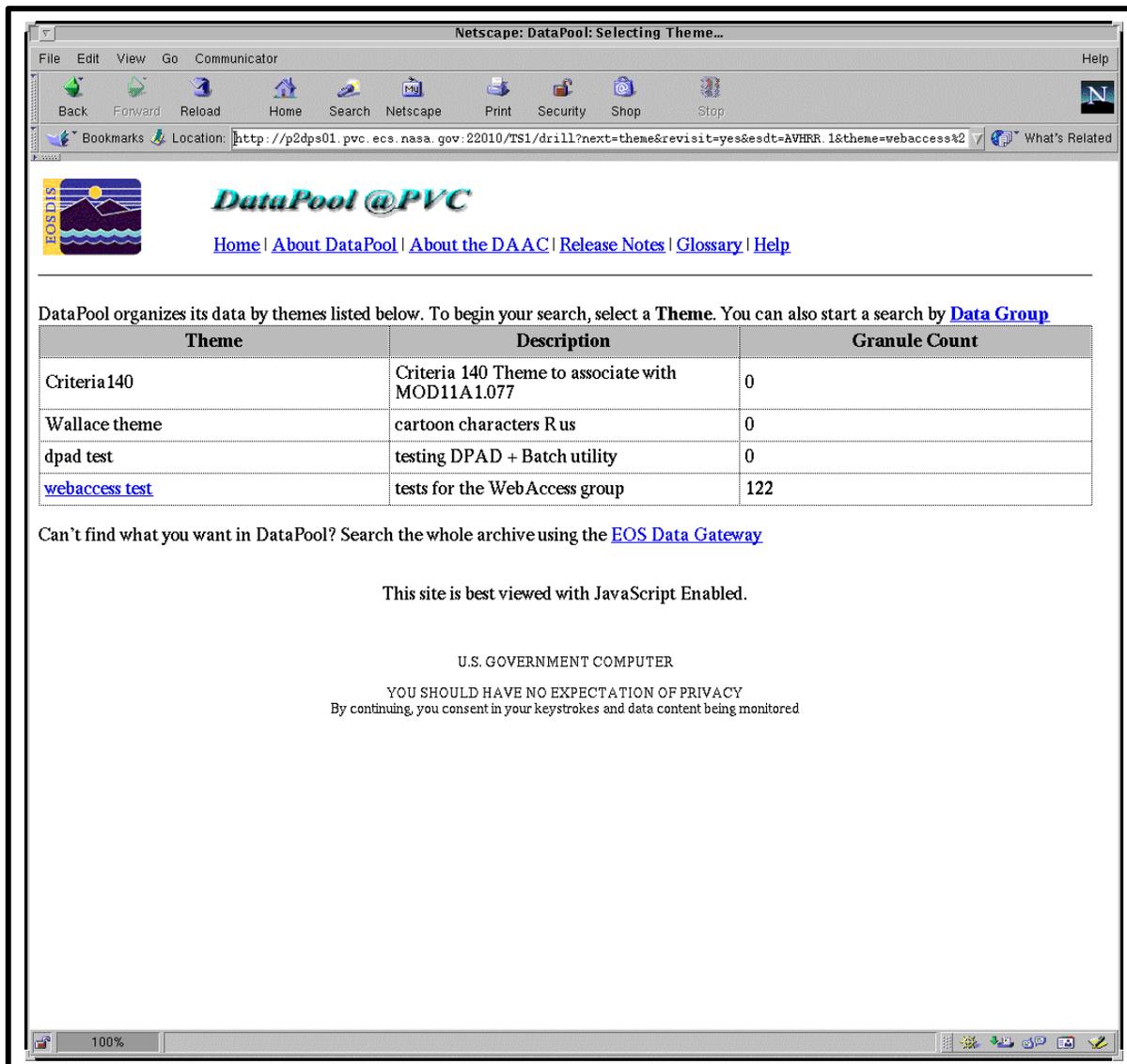


Figure 37. Data Pool Web Access: Select Theme

If the user elects to begin searching the Data Pool by **Data Group** (selecting that link from the screen shown in Figure 36), the interface displays the page illustrated in Figure 38 as the first selection screen. This page permits selection of a data group of interest. It lists data holdings with a brief description of each, granule count for each group, and a list of links to data groups for selection to start the search. There is also a link permitting the user to begin searching by **Theme** instead of by data group.

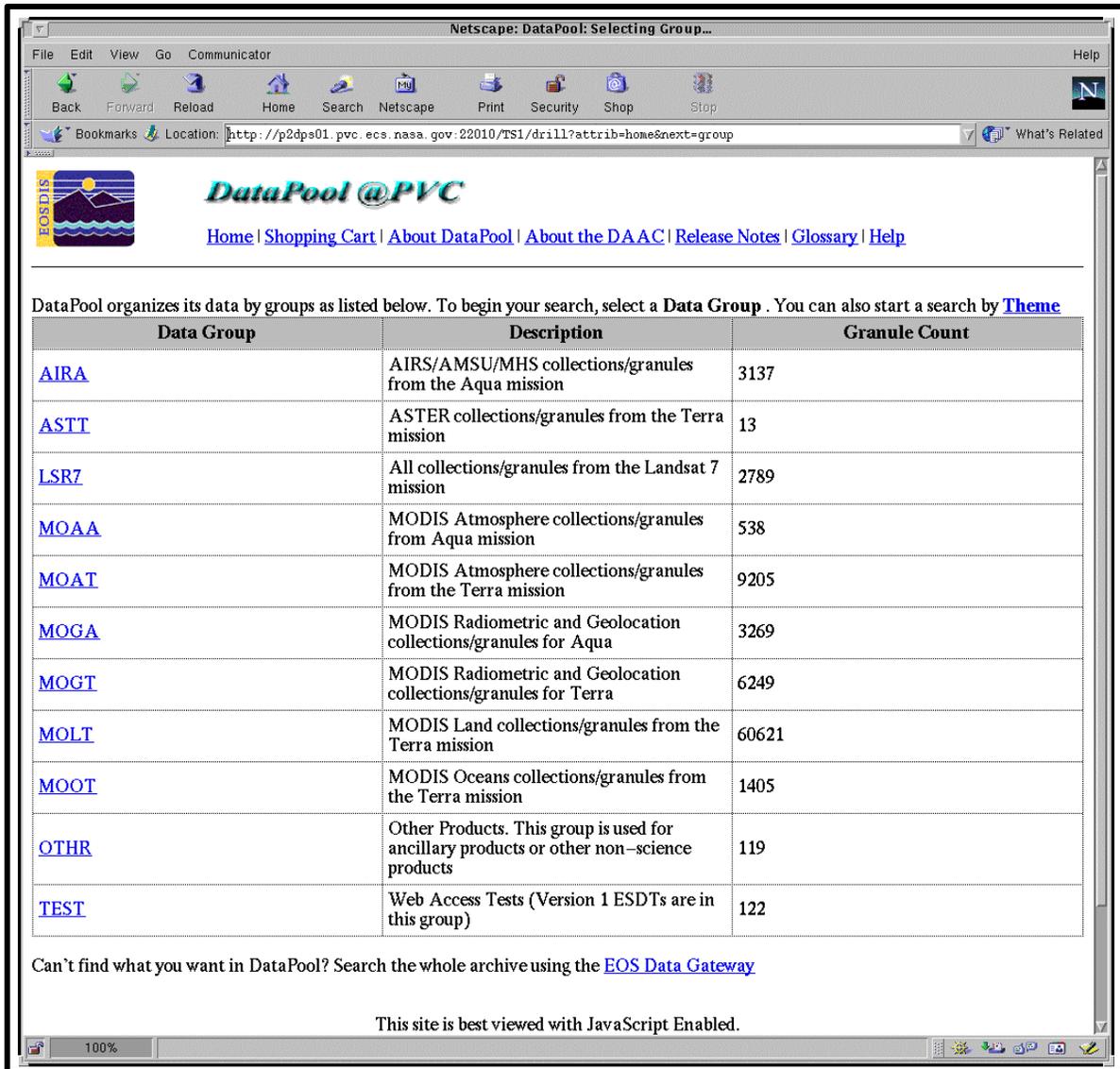


Figure 38. Data Pool Web Access: Select Data Group

Figure 39 shows the Select ESDT screen of the Data Pool web access interface. The screen displays the selected data group criteria and a list of links to Earth Science Data Types (ESDTs) for selection to narrow the search, along with information about the number of granules and volume of data available in the selected data group.

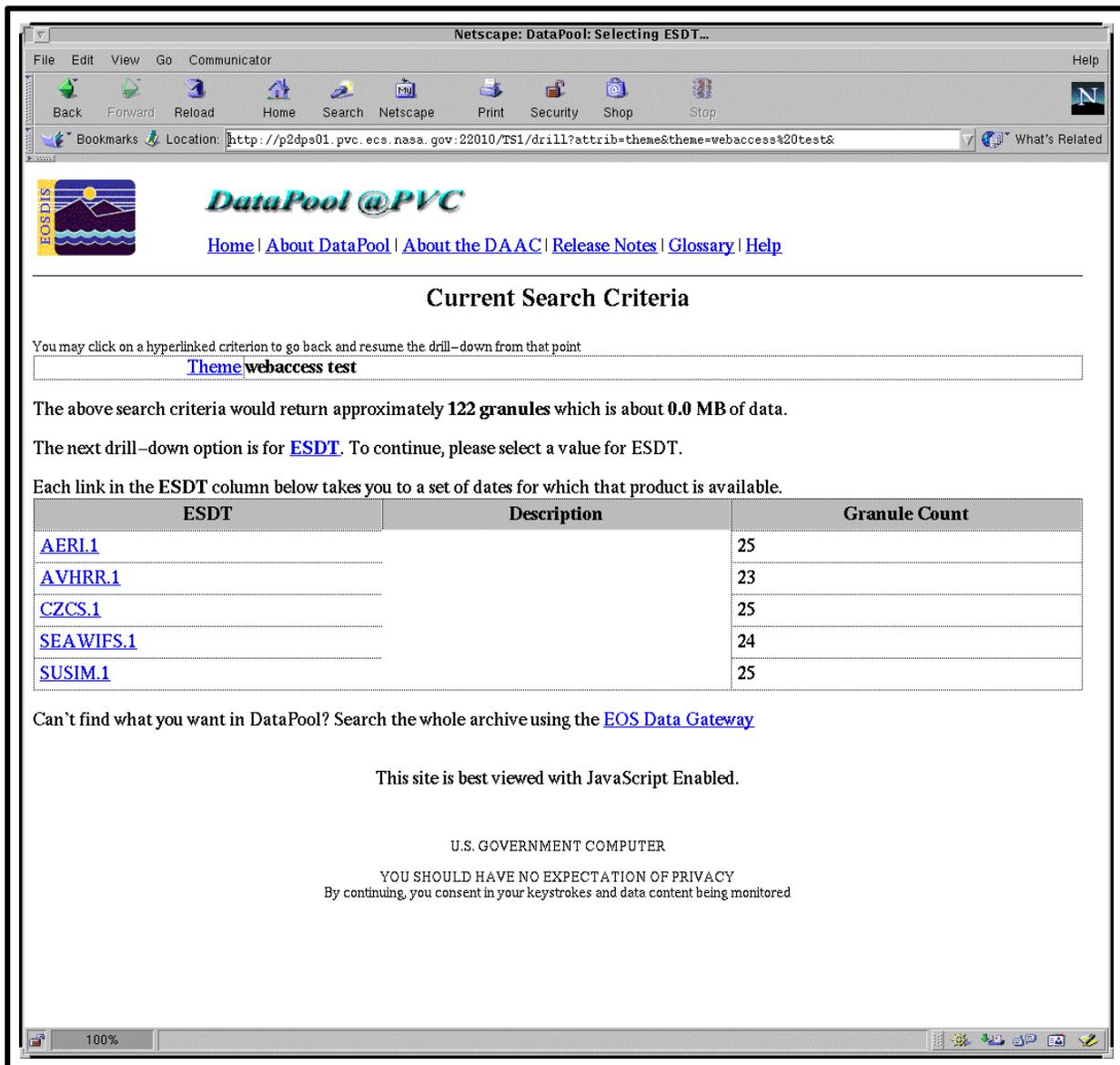


Figure 39. Data Pool Web Access: Select ESDT

Figure 40 shows the Select Temporal (Date) Criterion screen of the Data Pool web access interface. The screen displays the selected criteria through ESDT, a calendar tool (for selecting a day, week, or month for which active links indicate the availability of data), and, as an alternative means for selecting a date range, fields with pop-up menu buttons for specifying the start year, month, and day and end year, month, and day to narrow the search.

The screen also displays information about the number of granules and volume of data available in the selected ESDT. It offers a **Skip Temporal** link to move on to the next criterion without specifying a temporal criterion, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link. There is also a button permitting the user to add any selected date to the search criteria and continue to narrow the search.

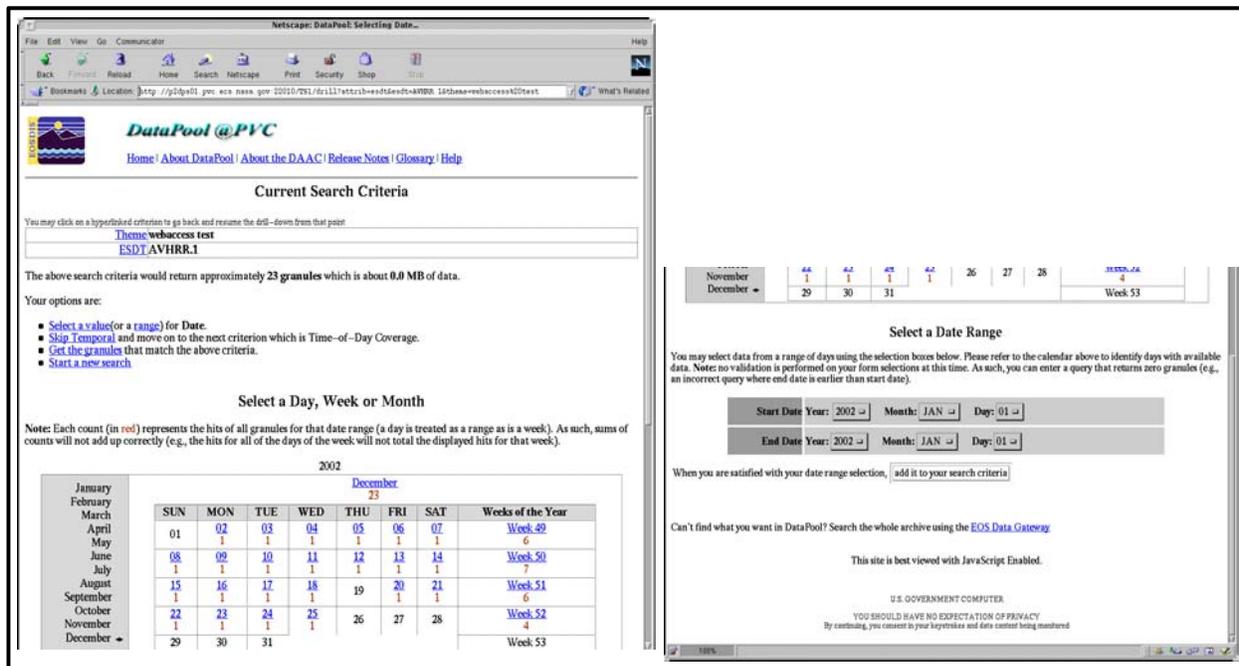


Figure 40. Data Pool Web Access: Select Temporal (Date) Criterion

Figure 41 shows the Select Time of Day screen of the Data Pool web access interface. The screen displays the selected criteria through Temporal, a matrix permitting the user to Select a Time of Day, and, as an alternative means for selecting a time range, fields with pop-up menu buttons for specifying a Start Time hour and minute and an End Time hour and minute to narrow the search.

The screen also displays information about the number of granules and volume of data available in the selected Temporal period. It offers a **Skip Time-of-Day** link to move on to the next criterion without specifying a time of day, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link. There is also a button permitting the user to add any selected time of day to the search criteria and continue to narrow the search.

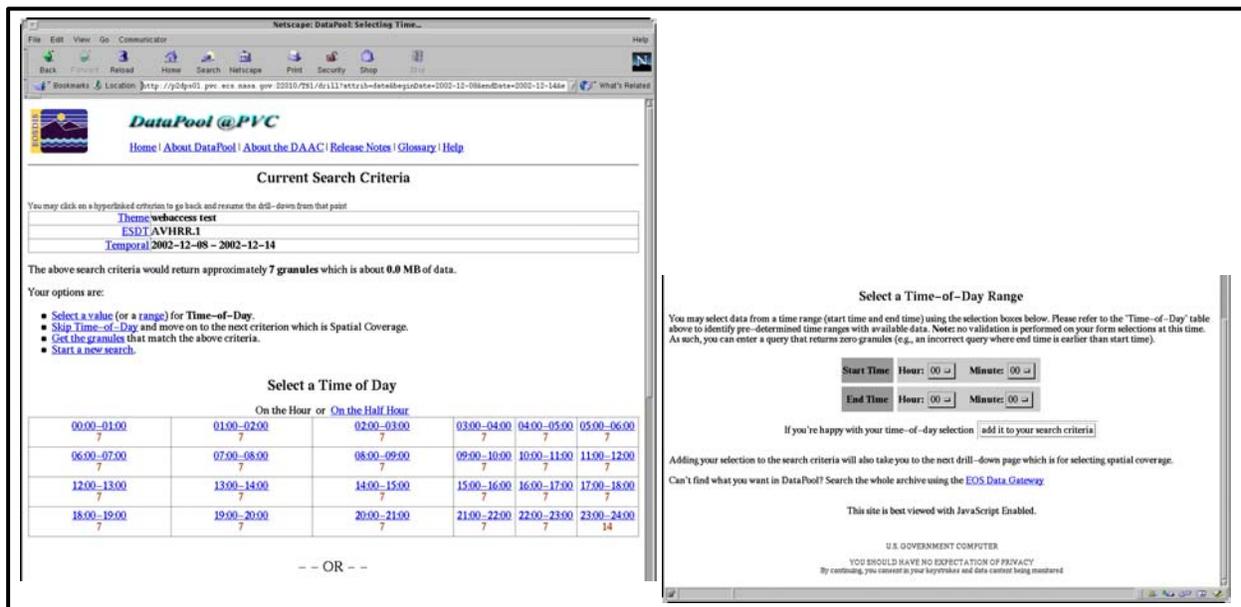


Figure 41. Data Pool Web Access: Select Time of Day

Figure 43 shows the Select Day/Night Flag screen of the Data Pool web access interface. The screen displays the selected criteria through spatial coverage and a table with links permitting the user to select a day/night flag to narrow the search.

The screen also displays information about the number of granules and volume of data available in the selected spatial search region. It offers a **Skip DayNightFlag** link to move on to the next criterion without specifying a Day/Night Flag value, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link.

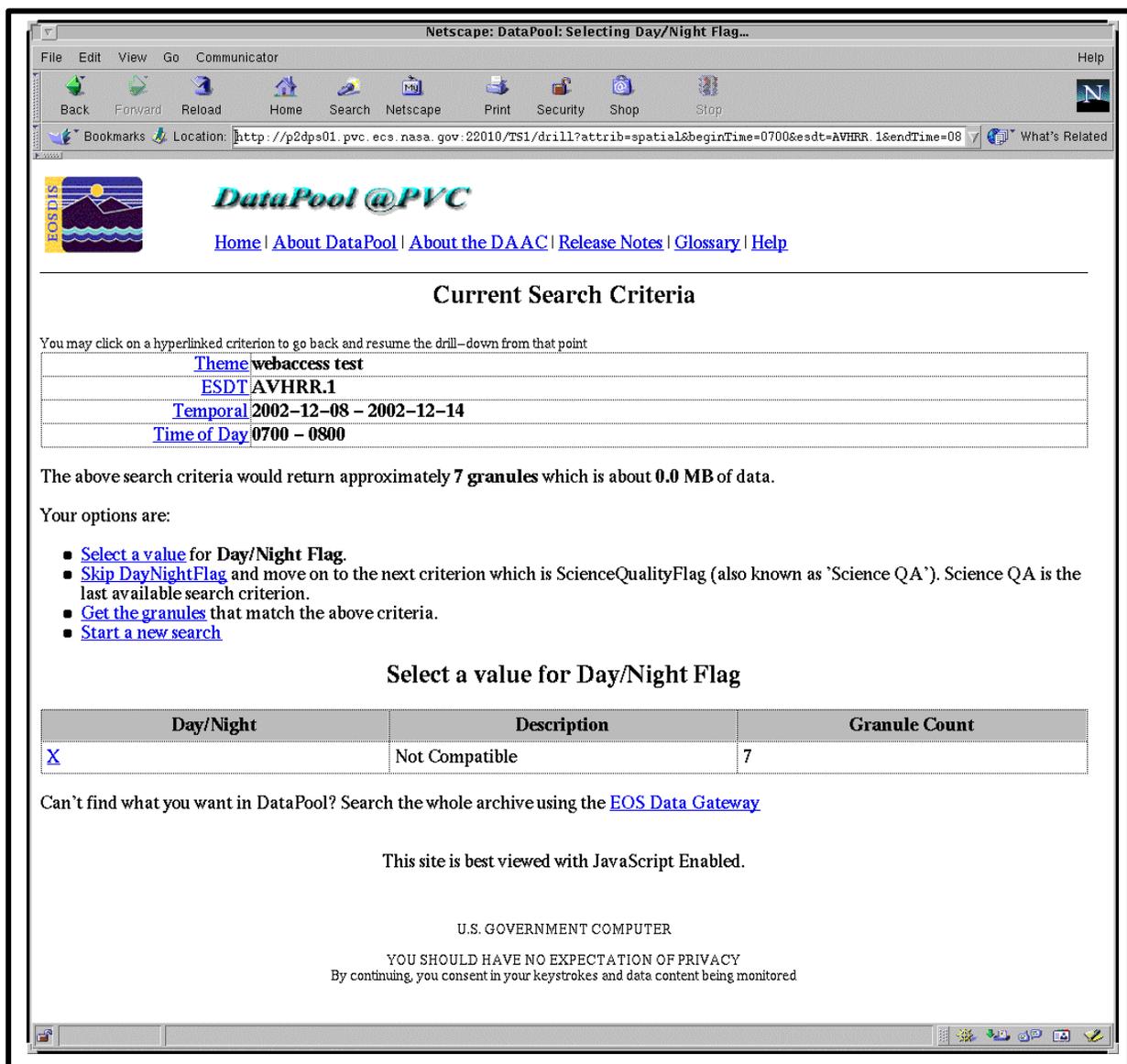


Figure 43. Data Pool Web Access: Select Day/Night Flag

Figure 44 shows the Select Science QA Flag screen of the Data Pool web access interface. The screen displays the selected criteria through day/night flag, a field with an option button permitting the user to specify a parameter on which to select QA values, a **Go** button to implement the listing of science QA values for the specified parameter, and a table with links permitting the user to select a QA value for the specified parameter.

The screen also displays information about the number of granules and volume of data available in the selected day/night flag category. It offers a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules and a **Start a new search** link.

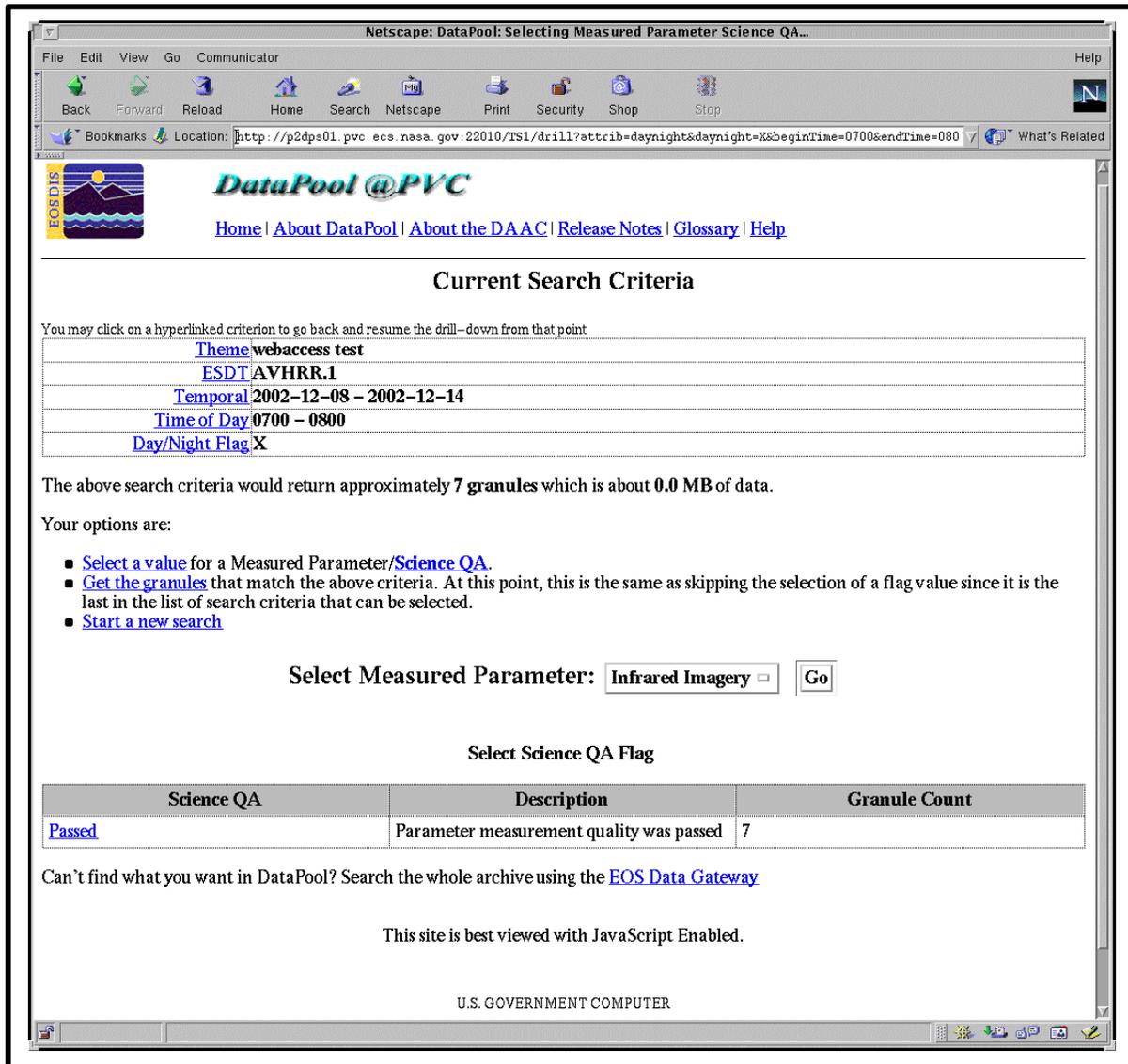


Figure 44. Data Pool Web Access: Select Science QA Flag

Figure 45 shows an example of a search results screens from the Data Pool web access interface. A typical results screen displays the selected criteria through selected **Science QA** value along with the results of the search. The located granules are listed in a table showing metadata on size, date and time, and day/night flag. There are **Metadata Display** links providing access to science QA metadata and % cloud cover metadata. An option button permits the user to specify a chunk size for returning granules and a **Go** button to implement the specified chunk size.

The **Granule** identification column in the results table displays for each listed granule an icon for obtaining the HDF data, an icon for displaying metadata in a separate Granule Metadata Viewer window, and, for any granule that has a browse image available, an icon for displaying associated browse images in a separate Browse Viewer window. There are also icons for selecting compression options for data to be downloaded; options include zip compression, gnu zip compression, and UNIX compression. For each granule, there is an icon composed of a “+” sign in front of a shopping cart to add the granule to the shopping cart. If appropriate, there may also be an icon for a converter function (HDF EOS – GeoTIFF) to convert the granule’s projection type.

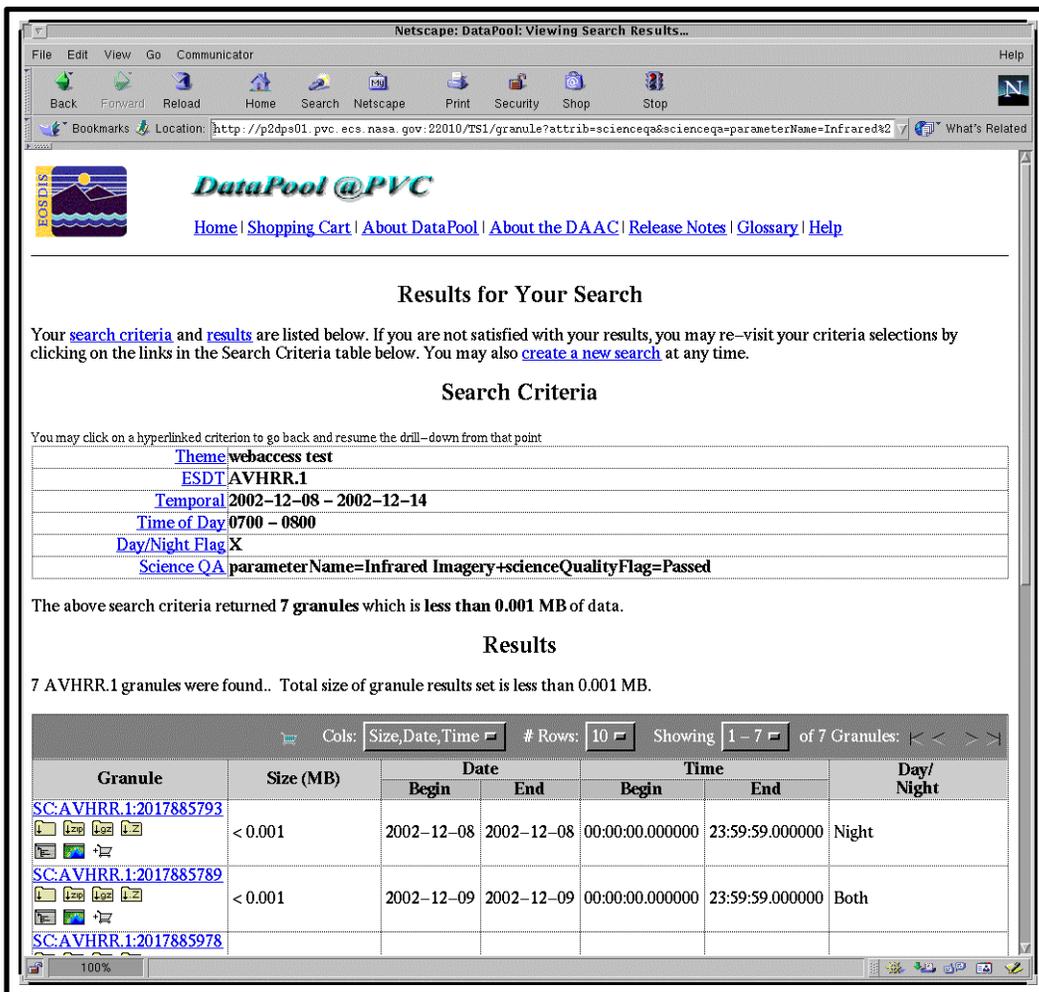


Figure 45. Data Pool Web Access: Search Results Screen

Figure 46 shows the Granule Metadata Viewer screen from the Data Pool web access interface. The viewer shows XML metadata for the selected granule; a scroll bar permits scrolling through the displayed metadata. There are also links for displaying metadata for other granules in the results list, and an icon for saving the metadata file.

The screenshot shows a Netscape browser window with two panes. The left pane displays search results for 'DataPool @PVC'. The right pane shows the 'Granule Metadata Viewer' for granule SC:AVHRR.1:2017885253.

Search Criteria

Theme: [webaccess test](#)
 ESDT: [AVHRR.1](#)
 Temporal: [2002-12-08 - 2002-12-14](#)
 Time of Day: [0700 - 0800](#)
 Day/Night Flag: [X](#)
 Science_QA: [parameterName=Infrared Imagery+scienceQualityFlag=Passed](#)

The above search criteria returned 7 granules which is less than 0.001 MB of data.

Results

7 AVHRR.1 granules were found.. Total size of granule results set is less than 0.001 MB.

Granule	Size (MB)	Date		Time	
		Begin	End	Begin	Time
SC:AVHRR.1:2017885793	< 0.001	2002-12-08	2002-12-08	00:00:00.000000	23:59:
SC:AVHRR.1:2017885789	< 0.001	2002-12-09	2002-12-09	00:00:00.000000	23:59:
SC:AVHRR.1:2017885978					

Granule Metadata Viewer

Current Granule/Row is 7 of 7: [First](#) | [Previous](#) | [Next](#) | [Last](#)

Metadata for SC:AVHRR.1:2017885253 (Granule/Row 7 of 7)

- GranuleMetaDataFile:
 - SchemaVersion: 1.0
 - DataCenterId: GSFC
 - GranuleMetaData:
 - CollectionMetaData:
 - ShortName: AVHRR
 - VersionID: 1
 - DataFilesContainer:
 - File: AVHRR_2002-12-14_00_00_00.1.dat
 - DataGranule:
 - SizeMB: 0.000095
 - LocalGranuleID: AVHRR_2002-12-14_00_00_00.1.dat
 - DayNightFlag: Day
 - ProductionDateTime: 2003-01-13 23:59:59.0
 - RangeDateTime:
 - RangeEndingTime: 23:59:59.000000
 - RangeEndingDate: 2002-12-14 00:00:00.0
 - RangeBeginningTime: 00:00:00.000000
 - RangeBeginningDate: 2002-12-14 00:00:00.0
 - SpatialDomainContainer:
 - HorizontalSpatialDomainContainer:
 - GPolygon:
 - Boundary:
 - ExclusionGRingFlag: N
 - Point:
 - PointLongitude: -60.000000
 - PointLatitude: 50.000000
 - Point:
 - PointLongitude: -50.000000
 - PointLatitude: 50.000000
 - Point:
 - PointLongitude: -50.000000
 - PointLatitude: 40.000000
 - Point:
 - PointLongitude: -60.000000
 - PointLatitude: 40.000000

Figure 46. Data Pool Web Access: Granule Metadata Viewer

Figure 47 shows the Browse Viewer screen from the Data Pool web access interface. The viewer shows any available browse image for the selected granule; a scroll bar permits scrolling of the image. There are also links for displaying browse images for other granules in the results list.

The screenshot shows a Netscape browser window titled "DataPool: Viewing Search Results...". The main content area displays the "DataPool @PVC" logo and navigation links. Below this, it shows "Results for Your Search" with a summary of search criteria and a table of results. A secondary window titled "Netscape: Viewing Browse for: SC:AVHRR.1:2017885253" is overlaid on the right, showing a "Browse Viewer" for the selected granule. This viewer displays two satellite images: a TIR image and a VNIR image, both labeled with their respective file names.

Search Criteria

You may click on a hyperlinked criterion to go back and resume the drill-down from that point

Theme	webaccess test
ESDT	AVHRR.1
Temporal	2002-12-08 - 2002-12-14
Time of Day	0700 - 0800
Day/Night Flag	X
Science QA	parameterName=Infrared Imagery+scienceQualityFlag=Passed

The above search criteria returned 7 granules which is less than 0.001 MB of data.

Results

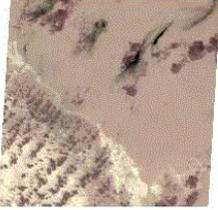
7 AVHRR.1 granules were found.. Total size of granule results set is less than 0.001 MB.

Granule	Size (MB)	Date		Time
		Begin	End	
SC:AVHRR.1:2017885793	< 0.001	2002-12-08	2002-12-08	00:00:00.000000 21
SC:AVHRR.1:2017885789	< 0.001	2002-12-09	2002-12-09	00:00:00.000000 23:59:59.000000 Both
SC:AVHRR.1:2017885978				

Browse Viewer

Current Granule/Row is 7 of 7: [First](#) | [Previous](#) | [Next](#) | [Last](#)

Browse Image for SC:AVHRR.1:2017885253 (Granule/Row 7 of 7)

 AVHRR_2002-12-14_00_00_00.1.3.TIR.jpg

 AVHRR_2002-12-14_00_00_00.1.1.VNIR.jpg

Figure 47. Data Pool Web Access: Browse Viewer

Figure 48 shows the Save dialog from the Data Pool web access interface. The dialog is displayed by clicking on the HDF Folder icon next to the listing of the granule to be downloaded.

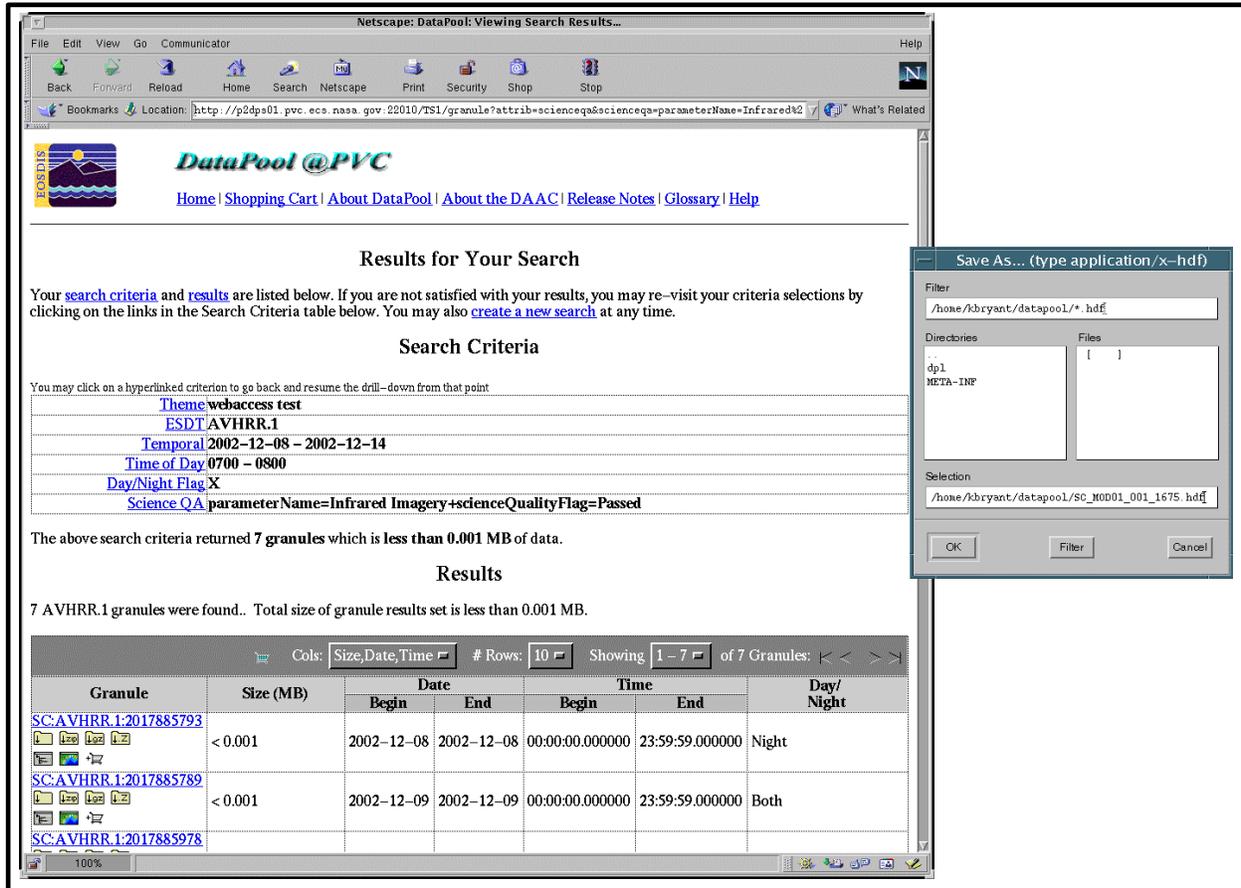


Figure 48. Data Pool Web Access: Save Dialog for Downloading

Figure 49 shows the HDF EOS - GeoTiff converter dialog obtained by clicking on the converter icon. The illustrated dialog shows the **Format & Projection** pull-down menu opened to show the available choices. The dialog permits a user who wants data in a format or projection different from that stored in ECS to select conversion parameters. At the bottom are entry fields for the user's **Name** (optional) and **E-mail address** (required), and a check box to mark if the user wants e-mail notice of the shipment regardless of conversion option selected.

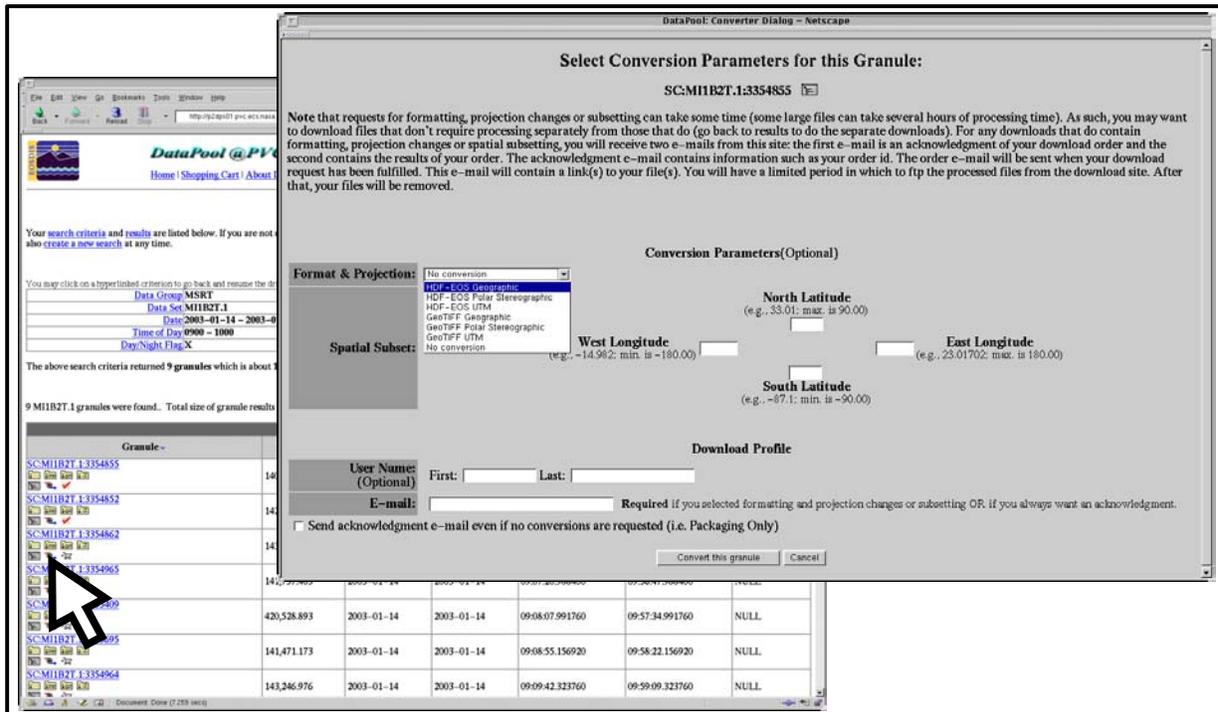


Figure 49. HDF EOS - GeoTiff (HEG) Converter Dialog

Figure 50 shows the **Your Shopping Cart** window obtained by clicking on the **View Shopping Cart** link at the bottom of the results page. The **Your Shopping Cart** window lists the granules for which a user has checked the shopping cart icon on the results page, along with an icon for displaying metadata in a separate Granule Metadata Viewer window, and, for any granule that has a browse image available, an icon for displaying associated browse images in a separate Browse Viewer window. There is also an icon composed of a “-” sign in front of a shopping cart to remove the granule from the shopping cart, and there are columns listing the size of the granules and the format and projection type for each. As the figure shows, the window also provides options for global conversion utilities; the figure shows the **Global Format & Projection** pull-down menu opened to illustrate the choices. At the bottom are entry fields for the user’s **Name** (optional) and **E-mail address** (required), and a check box to mark if the user wants e-mail notice of the shipment regardless of conversion option selected.

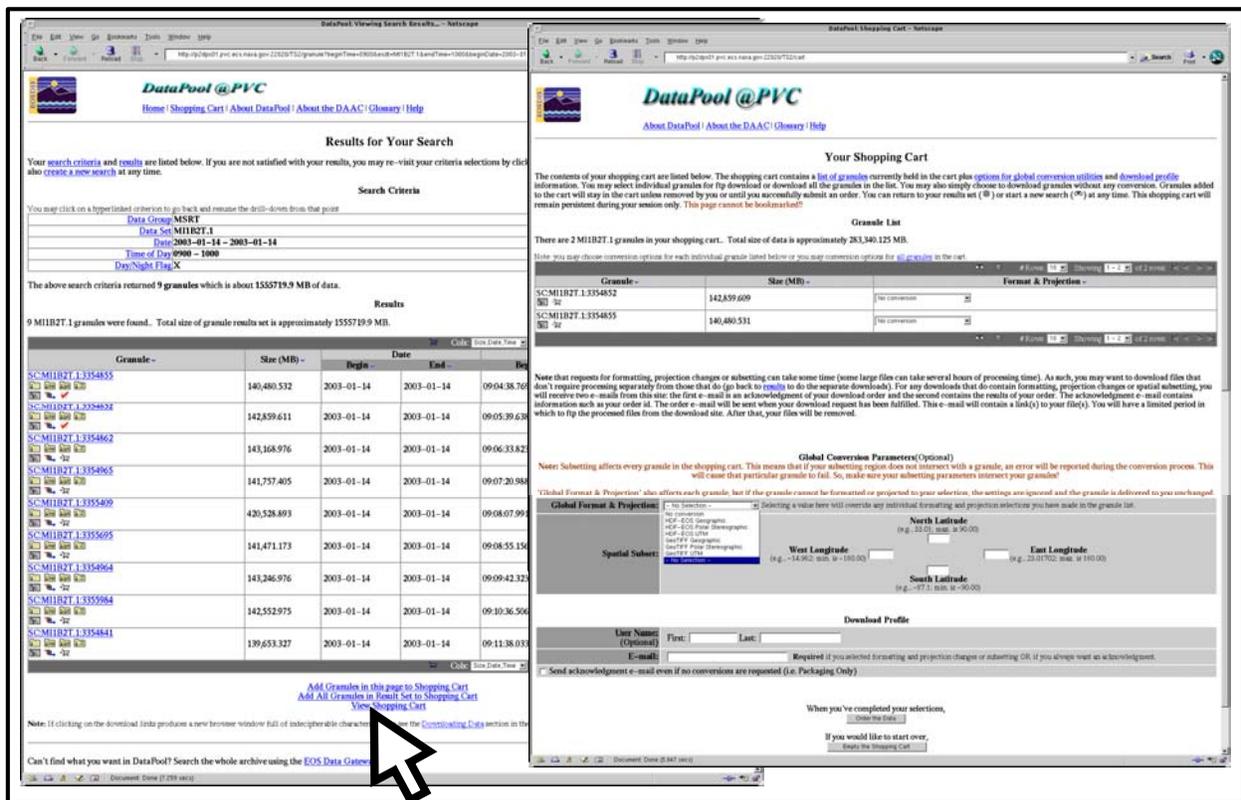


Figure 50. Data Pool Web Access Shopping Cart Window

Data Pool Access Using the EDG

For Synergy III, there is a modification to the EDG that indicates to a user any granules among the search results that are accessible on line – i.e., in the Data Pool – and provides links to the data, metadata, and browse data to allow download from the Data Pool. When a user searches ECS data holdings and obtains a list of granules, if the Data Pool contains a copy of any of the granules and associated metadata or browse data, there will be links in the **On-line Access** column of the listing, as illustrated in Figure 51. A click on a link for data or metadata results in display of a **Save As . . .** dialog to specify a location for download of the information from the Data Pool. A click on a link for browse data launches the browse image in a browse viewer.

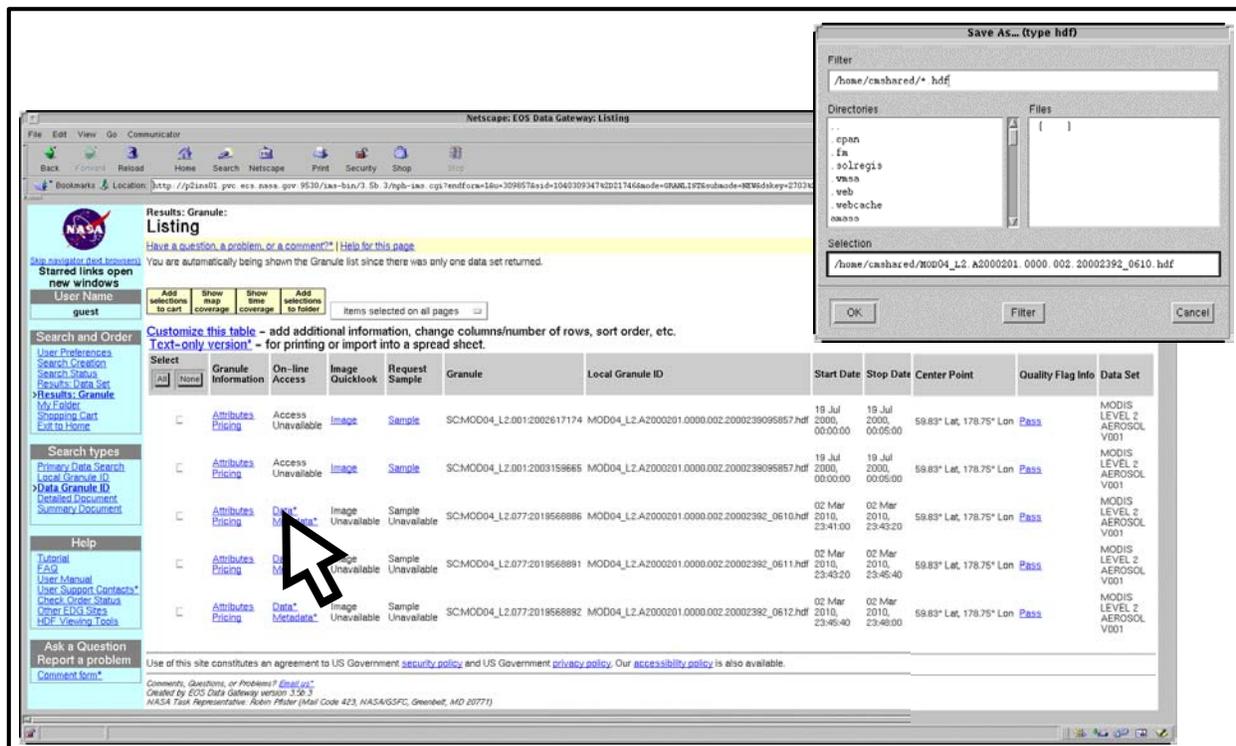


Figure 51. EDG Access to Data Pool (On-line Access)

The process for locating and downloading data from the Data Pool using the web access interface tool entails a progressive narrowing of granule selection followed by specification of the path for saving the data to be downloaded. The following procedure is applicable.

Locate and Download Data from the Data Pool using the Data Pool Web Access

- At the UNIX command shell prompt, type **setenv DISPLAY clientname:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.

- 2 Start the log-in to a Netscape host by typing `/tools/bin/ssh hostname` (e.g., `g0ins02`, `e0ins02`, `l0ins02`, `n0ins02`) at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type `yes` (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key '*<user@localhost>*'** appears; continue with Step 3.
 - If you have not previously set up a secure shell passphrase; go to Step 4.
- 3 If a prompt to **Enter passphrase for RSA key '*<user@localhost>*'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 5.
- 4 At the *<user@remotehost>*'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - You are logged in and a UNIX command shell prompt is displayed.
- 5 Type `netscape` and then press the **Return/Enter** key.
 - The Netscape web browser is displayed.
- 6 Click in the **Netsite:** field.
 - The field is highlighted.
- 7 Type the Universal Resource Locator (URL) for the data pool at the local site and then press the **Return/Enter** key.
 - The **DataPool@DAACsite** welcome screen is displayed, offering a brief description of the data holdings and links enabling the user to start searching the Data Pool by **Data Group** or by **Theme**.
- 8 Click on one of the links to start searching the Data Pool.
 - The first selection screen is displayed. If the search was started by clicking on the **Data Group** link, the screen lists data holdings by data group with a brief description of each group, granule count for each group, and a list of links to data groups for selection to start the search. If the search was started by clicking on the **Theme** link, the screen lists themes with a brief description and granule count for each, with the theme names functioning as links for selection to start the search.
- 9 If the search is by **Theme**, click on the name of the theme for which the Data Pool is to be searched.
 - A list of data groups is displayed for the selected theme.

10 Click on the link for the **Data Group** to be searched for appropriate or desired data.

- The screen displays the selected **Data Group** criteria and a list of links to Earth Science Data Types (**ESDTs**) for selection to narrow the search, along with information about the number of granules and volume of data available in the selected **Data Group**.

11 Click on the link for the **ESDT** to be searched for appropriate or desired data.

- The screen displays the selected criteria through **ESDT**, a calendar tool (for selecting a **day**, **week**, or **month** for which active links indicate the availability of data), and, as an alternative means for selecting a date range, fields with pop-up menu buttons for specifying the **Start** year, month, and day and **End** year, month, and day to narrow the search based on temporal criteria.
- The screen also displays information about the number of granules and volume of data available in the selected **ESDT**. It offers a **Skip Temporal** link to move on to the next criterion without specifying a temporal criterion, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link. There is also a button permitting the user to add any selected date to the search criteria and continue to narrow the search.

12 If desired, click on a **day**, **week**, or **month** on the calendar tool, or click on pop-up menu buttons and select a **Start** year, month, and day and **End** year, month, and day, and then click on the **add it to your search criteria** button. (*Note:* If you click on a month in the shaded box at the left of the calendar tool, the selected month is displayed on the tool.)

- The screen displays the selected criteria through **Date**, a matrix permitting the user to **Select a Time of Day**, and, as an alternative means for selecting a time range, fields with pop-up menu buttons for specifying a **Start Time** hour and minute and an **End Time** hour and minute to narrow the search.
- The screen also displays information about the number of granules and volume of data available in the selected Temporal period. It offers a **Skip Time-of-Day** link to move on to the next criterion without specifying a time of day, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link. There is also a button permitting the user to add any selected time of day to the search criteria and continue to narrow the search.

13 If desired, click on a specific **time** (hour) on the matrix, or click on pop-up menu buttons and select a **Start Time:** hour and minute and **End Time:** hour and minute, and then click on the **add it to your search criteria** button. (*Note:* If you click on the link at the top of the matrix, the times displayed in the matrix can be toggled between starting **On the Hour** and starting **On the Half Hour**.)

- The screen displays the selected criteria through **Time of Day**, a map permitting the user to **Select from Map** (for Java-enabled browsers) to create a spatial search region, and, as an alternative means for creating a spatial search region, fields for specifying **North Latitude**, **South Latitude**, **West Longitude**, and **East Longitude** to select a bounding rectangle to narrow the search.
- The screen also displays information about the number of granules and volume of data available in the selected Time Range. It offers a **Skip choosing a spatial constraint** link to move on to the next criterion without specifying a time of day, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link. There is also a button permitting the user to add any selected spatial polygon or bounding rectangle to the search constraints and continue to narrow the search.

14 If desired (and if using a Java-enabled browser), click repeatedly on the map to indicate successive points defining a polygon as a desired spatial search region, or drag the mouse to highlight a tile on the map, or sequentially click in the four latitude and longitude fields and type the coordinates for a desired spatial search region.

- The bounding polygon, rectangle, or tile appears on the map display, and/or the typed entries appear in the latitude and longitude fields.

15 Click on the **Add to Constraints** button.

- The screen displays the selected criteria through **Spatial Coverage** and a table with links permitting the user to **Select a Day/Night Flag** to narrow the search.
- The screen also displays information about the number of granules and volume of data available in the selected spatial search region. It offers a **Skip DayNightFlag** link to move on to the next criterion without specifying a Day/Night Flag value, a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules, and a **Start a new search** link.

16 If desired, click on one of the links in the **Day/Night** column of the table.

- The screen displays the selected criteria through **Day/Night Flag**, a **Select Science QA for this Data Type Parameter** field with a pop-up menu button permitting the user to specify a parameter on which to select QA values, and a table with links permitting the user to select a QA value for the specified parameter.
- The screen also displays information about the number of granules and volume of data available in the selected day/night flag category. It offers a **Get the granules** link permitting an immediate search for granules based on the criteria narrowing the search to those granules and a **Start a new search** link.

17 If desired, click on the **Select Science QA for this parameter:** option button.

- A pop-up menu displays available parameters.

18 Click on the desired parameter.

- The selected parameter name is displayed on the **Select Science QA for this parameter** option button and the QA links and information in the table reflect the selected parameter.

19 Click on one of the value links in the **Science QA** column of the table.

- The search for granules is executed and the screen displays the selected criteria through selected **Science QA** value along with the results of the search. The located granules are listed in a table showing metadata on **Size, Date and Time**, and **Day/Night** flag. There are **Metadata Display** links providing access to **Science QA** metadata and **% Cloud Cover** metadata.
- The **Granule** identification column in the results table displays for each listed granule an icon for obtaining the **HDF** data, an icon for displaying metadata in a separate **Granule Metadata Viewer** window, and, for any granule that has a browse image available, an icon for displaying associated browse images in a separate **Browse Viewer** window.

20 If desired, click on the **Science QA** link or **% Cloud Cover** link for different **Metadata Display**.

- Columns of the selected metadata are displayed in the results table, and availability of additional columns is indicated by the appearance of navigational arrow(s) on either side of the attribute name above the column labels.

21 If desired, click on one of the navigational arrows to display other columns of the selected metadata.

- Additional columns are displayed.

- 22 If desired, in the **Granule** identification column, click on an icon for the **Granule Metadata Viewer** for one of the granules.
- The **Granule Metadata Viewer** is displayed in a separate window, showing XML metadata for the selected granule; a scroll bar permits scrolling through the displayed metadata.
- 23 If desired, in the **Granule** identification column, click on an icon for the **Browse Viewer** for one of the granules.
- The **Browse Viewer** is displayed in a separate window, showing any available browse image for the selected granule; a scroll bar permits scrolling of the image.
- 24 If desired, in the **Granule** identification column, click on the **HDF** folder icon (or on the granule identification link) to initiate download of the granule.
- The save dialog is displayed.
- 25 Enter any desired path specification for the download and click on the **OK** button.
- The selected granule is downloaded to the specified location.
- 26 If desired, in the **Granule** identification column, click on the Shopping Cart icon for any granule(s) you want to order in a group (e.g., that you want to order all using the same compression type).
- A check mark is displayed on each Shopping Cart icon clicked.
- 27 To view the contents of the Shopping Cart, click on the **View Shopping Cart** link at the bottom of the results list.
- The granules in the Shopping Cart are listed in a table.
 - The **Granule** identification column in the results table displays for each listed granule an icon for obtaining the **HDF** data, an icon for displaying metadata in a separate **Granule Metadata Viewer** window, and, for any granule that has a browse image available, an icon for displaying associated browse images in a separate **Browse Viewer** window. For each granule, there is also an icon consisting of a minus sign in front of a Shopping Cart, which may be used to remove the granule from the Shopping Cart.
 - At the bottom of the list are entry fields for your **Name** (optional) and **E-mail address** (required), and a check box to mark if you want e-mail notice of the shipment regardless of conversion option selected.
- 28 Click in the **E-mail address** field.
- The cursor is displayed in the field.
- 29 Type your e-mail address.
- The typed entry is displayed in the field.

30 Click on the **Order the Data** button at the bottom of the window.

- A confirmation dialog box states **Your order cannot be changed once you have submitted it. Are you ready to submit this order?**

31 Click on the **OK** button in the confirmation dialog box.

- A submittal confirmation message states that your data pool order has been submitted and provides an order number.

Data Pool FTP Service

A user may choose to use the Data Pool FTP service instead of the Data Pool Web Access Tool to download data from the Data Pool. The data in the Data Pool are stored in a predefined directory structure of the following form:

./<DataPool Home Directory>/<Data Pool Collection Group>/<shortname.versionid>/<acquisition date>

where:

- *<DataPool Home Directory>* is the top-level home directory for the Data Pool.
- *<DataPool Collection Group>* is one of a predefined set of ECS data groupings.
- *<shortname.versionid>* is the indicates the ESDT short name and version ID.
- *<acquisition date>* indicates the data acquisition date.

Data Pool provides anonymous FTP service supporting data access through interactive FTP sessions as well as through customized scripts to search and download data. User Services must be prepared to assist users who may be using this service. In a common FTP scenario, a user may be expected to initiate an interactive FTP session from a remote host, or from a web browser. The user then executes typical FTP session activities, such as:

1. User logs in to the Data Pool FTP service as an anonymous user, providing a user e-mail address as the password.
2. The user is connected and placed by the Data Pool FTP service in a default directory configured for the service.
3. The user navigates the directory structure to search for the data file(s) of interest, using UNIX commands such as **cd** and **ls**.
4. The user downloads a single data file or multiple data files of interest to a local area on the remote disk.
5. The user may repeat steps 3 and 4 until all files of interest have been downloaded.
6. The user logs out of the Data Pool FTP service.

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Data Dictionary Maintenance

Requests for ECS services may come from the EOS Data Gateway (EDG) Web Client of Version 0 (V0). For example, users, including those from the ASTER Ground Data System (GDS), will submit requests for data searches and product orders using the EDG Search and Order Tool. Requests for ECS products or services (e.g., Directory Search requests, Inventory Search requests, Browse requests, Product requests) are sent to the ECS V0 Gateway. To accommodate mapping of terminology between the ECS and the V0 system, the ECS V0 Gateway reads the ECS Data Dictionary containing the terminology mapping information, ensuring that the request can be directed to the appropriate science data server. A Data Dictionary Administrator builds the ECS Data Dictionary V0 System search parameters, ECS schema, and metadata. The V0 client must have ECS Valid terminology for searchable attributes (e.g., source, sensor, geophysical parameter, data set name, data center ID, campaign, processing level, geographical coordinates, and temporal intervals) in order to search ECS holdings.

Accordingly, upon establishment of a new ECS data set, valids for the data set must be made available to V0. EOSDIS V0 IMS has a two-week valids update cycle:

- Data centers (sites) submit their new valids, definitions, and/or package Object Description Language (ODL) file(s). An ODL file is a formatted ASCII text file that contains the keyword descriptions for the data sets.
- Valid ODL files are transferred to the V0 IMS using anonymous FTP.
- The IMS team acknowledges receipt of the new valids submission and runs a syntax checker on the files.
- The files are processed and the valids are tested.

More detailed information on the cycle and the update process may be obtained at http://harp.gsfc.nasa.gov/v0ims/valids/valids_procedures.html.

There is two-way interoperability with the ASTER GDS for product search and orders. This means that ASTER GDS users can search, browse, and order ECS products, and ECS users can search, browse, and order products available at GDS. Information is also exchanged concerning price estimates and order status. ASTER GDS access to ECS products and services is through the EROS Data Center (EDC). Therefore, all ECS collection information must be available at EDC. Furthermore, ECS must be able to use ASTER GDS dataset valids.

The Data Dictionary Maintenance Tool (DDMT), illustrated in Figure 52, is an ECS tool to support management of ECS valids and mapping of ECS metadata to V0 attributes and values, as well as to ASTER GDS attributes and values. It supports import of ASTER GDS dataset valids, and it supports export of ECS dataset valids. The figure shows the **Modify Data** tab, which is the initial screen displayed when the tool is launched.

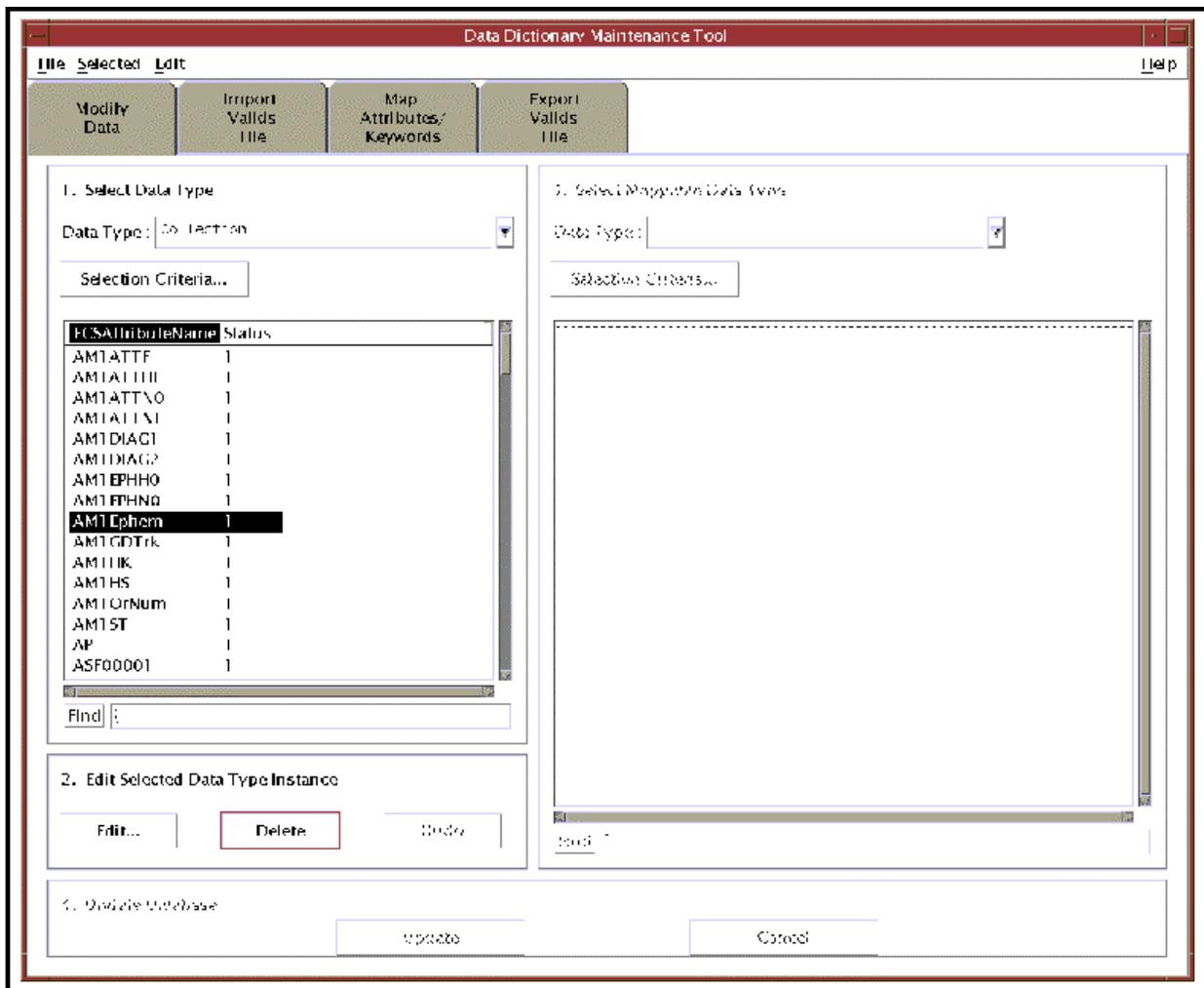


Figure 52. Data Dictionary Maintenance Tool, Modify Data Tab

Use the following procedure to launch the Data Dictionary Maintenance Tool.

Launch Data Dictionary Maintenance Tool

- 1 Access the command shell
 - The command shell prompt is displayed.
- 2 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.

- 3 Start the log-in to the interface server by typing `/tools/bin/ssh hostname` (e.g., g0ins02) at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type yes (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase; go to Step 5.
 - 4 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 6.
 - 5 At the `<user@remotehost>`'s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - 6 To change to the directory containing the utility scripts to start the Data Dictionary Maintenance Tool GUI, type `cd /path` and then press the **Return/Enter** key.
 - For *path*, use `/usr/ecs/<mode>/CUSTOM/utilities`, where `<mode>` will likely be **TS1**, **TS2**, or **OPS**.
 - 7 Type `EcDmDdMaintenanceToolStart <mode>`, where `<mode>` is that selected in Step 6, and then press the **Return/Enter** key.
 - The initial screen of the **Data Dictionary Maintenance Tool** is displayed.
-

The Data Dictionary Maintenance Tool **Map Attributes/Keywords** tab, illustrated in Figure 53, allows the operator to set up an association between ECS and non-ECS attributes and keywords. An operator can choose a non-ECS term from a list, and map that term to the correct corresponding ECS term. Once satisfied with the mapping, the user clicks on the **Update All Collections** button at the bottom of the screen. This initiates an update process, which may take several minutes to complete (*Note:* There may be no indication, such as the appearance of an hourglass graphic, that the system is processing the request).

The **Update All Collections** button on the **Map Attributes/Keywords** tab is now used only when importing valids. The software includes an automatic refresh of the mapping for all collections when an ESDT is added or reloaded. Therefore, it is not necessary to use this button to perform the refresh manually when ESDTs are loaded.

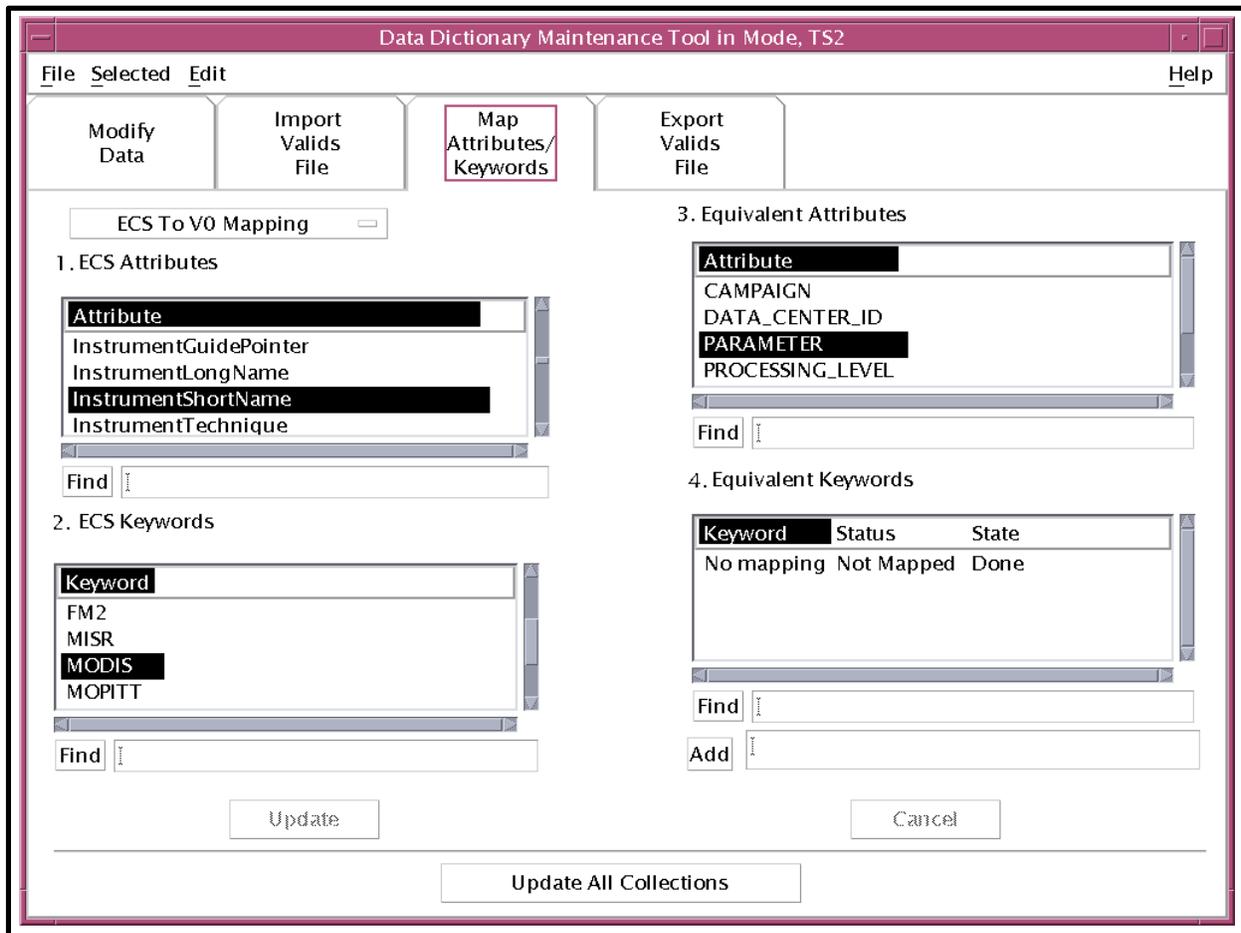


Figure 53. Data Dictionary Maintenance Tool, Map Attributes/Keywords Tab

Exporting Valid

Periodically, and as new products/ESDTs are added to ECS, information about the valid attributes and values for them must be made available to the V0 IMS and to ASTER GDS, so that the information can be used to search and order ECS data, including those new products/ESDTs. This is accomplished by using the Data Dictionary Maintenance Tool to export valids, at the tab illustrated in Figure 54.

The screenshot shows the 'Export Valid File' tab in the Data Dictionary Maintenance Tool. The interface includes a menu bar with 'File', 'Selected', 'Edit', and 'Help'. Below the menu bar are four tabs: 'Modify Data', 'Import Valid File', 'Map Attributes/ Keywords', and 'Export Valid File'. The 'Export Valid File' tab is selected. The main area is divided into four sections:

1. Select Export Protocol: A dropdown menu showing 'V0-IMS'.
2. Get list of collections: A button labeled 'Selection Criteria...'.
3. Select collections to export: A table with columns 'Short Name', 'Version Id', and 'Status'. The table contains one row: 'MOD01', '1', 'Export'.
4. Export collections to file: A text field for 'File name for export' containing '/home/cmts2/mod01.valid', followed by 'or' and a 'Browse...' button.

At the bottom of the window are 'Save' and 'Cancel' buttons.

Figure 54. Data Dictionary Maintenance Tool, Export Valid File Tab

Use the following procedure to select a collection for export of valids and to specify the name and location for a file to be written.

Export Valid

- 1 Launch the Data Dictionary Maintenance Tool.
- 2 Click on the **Export Valid File** tab.
 - The Export **Valid File** screen is displayed.

- 3 Click on the **Selection Criteria . . .** button in the **1. Get list of collections** area.
 - A **Database List (Export Collections)** dialog box is displayed
- 4 In the **Database List (Export Collections)** dialog box, click on the pull-down arrow to the right of the **Characteristic Type:** field.
 - Criteria displayed in a drop-down list include: **Export Collection, Attribute, Instrument, Keyword, Platform, Sensor, and Information Manager.**
- 5 Click on **Export Collection** in the drop-down list.
 - The selected item appears in the **Characteristic Type:** field.
- 6 In the **Database List (Export Collections)** dialog box, click on the pull-down arrow to the right of the **Characteristic Name:** field.
 - A drop-down list of names is displayed.
- 7 Click on **Archive Center** in the drop-down list.
 - The selected item appears in the **Characteristic Name:** field.
- 8 Click on the **Predicate:** option button and select **Is Equal To.**
 - The selected option is displayed on the button.
- 9 Click in the **Value:** field and type *<Center>*, where *<Center>* is the designation for your DAAC (e.g., **GSFC, EDC, LARC, NSIDC**).
 - The typed entry appears in the field.
- 10 Click on the **OK** button.
 - The **Database List (Export Collections)** dialog box is closed and a list of **Collections** is displayed in the **2. Select collections to export** area of the **Export Validates File** screen.
- 11 Double click on one of the collections for which valids are to be exported.
 - The selected collection is highlighted and **Export** is displayed in the **Status** column next to the highlighted selection.
 - *Note:* Multiple collections may be selected by use of the **Shift** and/or **Control** keys. Contiguous items in the list may be selected by holding down the **Shift** key while double clicking on additional items. Non-contiguous items in the list may be selected by holding down the **Control** key while double clicking on an additional item.
- 12 Click in the **File name for export:** field in the **3. Export collections to file** area.
 - The cursor moves to the **File name for export:** field.
- 13 Type the path to specify a directory and name for the export file to be saved.
 - The typed entry is displayed in the **File name for export:** field.

14 Click on the **Save** button.

- An "error" dialog box is displayed with the message **The Query Succeeded for all the collections**, indicating that the export file was saved.

The other active tab in the current version of the Data Dictionary Maintenance Tool is the **Import Valid File** screen, illustrated in Figure 55. This tab is used for import of ASTER dataset valids.

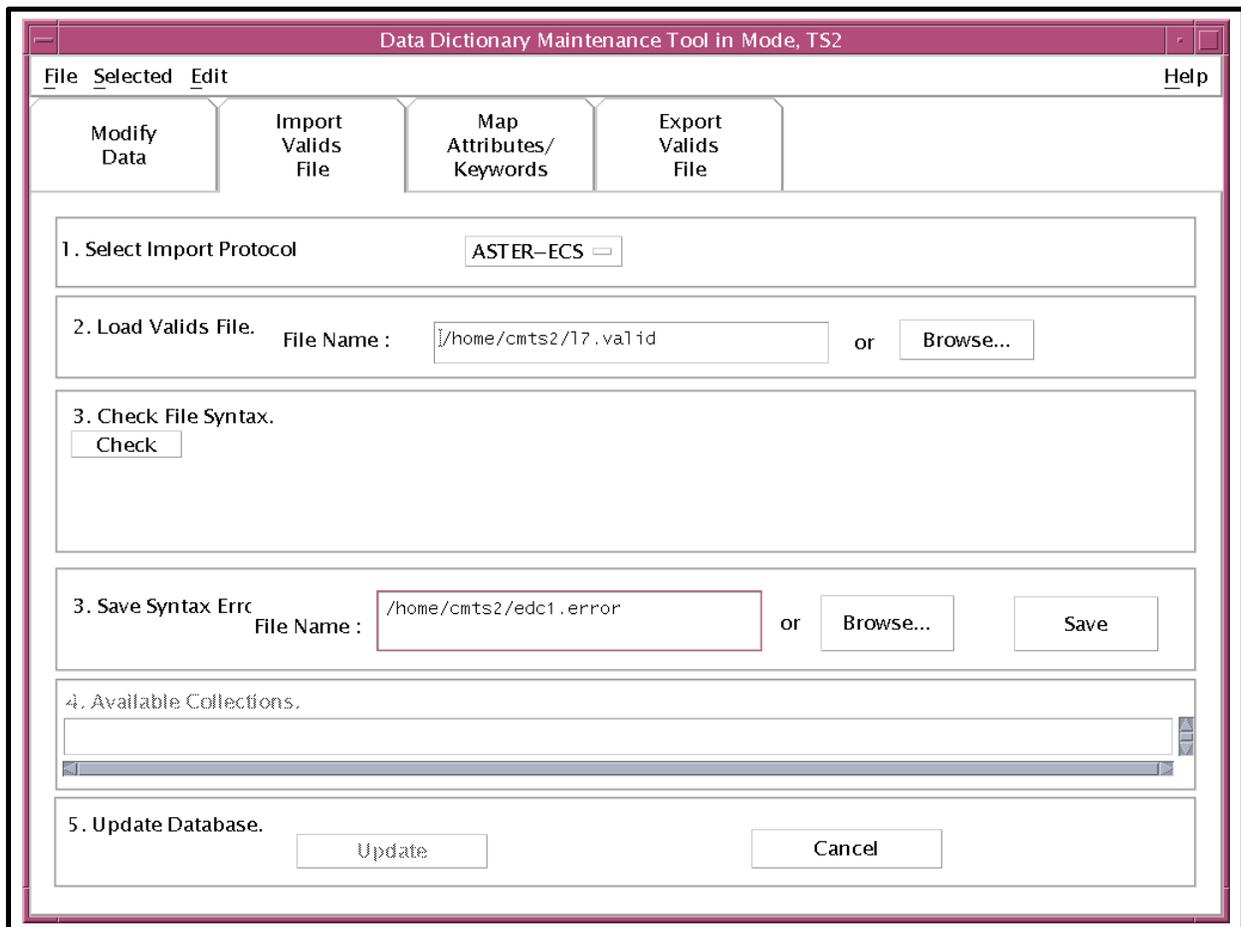


Figure 55. Data Dictionary Maintenance Tool, Import Valid File Tab

Use the following procedure for import of ASTER dataset valids.

Import Validis

- 1 Launch the Data Dictionary Maintenance Tool.
 - 2 Click on the **Import Validis File** tab.
 - The **Import Validis File** screen is displayed.
 - 3 Under **Load Validis File.**, click in the **File Name:** field and type *<validsfilename>*.
 - *<validsfilename>* is the full path for the file to be imported. It is possible to click on the **Browse . . .** button and click to select the file.
 - The typed or selected entry is displayed in the **File Name:** field.
 - 4 Click on the **Check** button.
 - The system checks the syntax of the valids file and generates any collection messages.
 - 5 Under **Save Syntax Error File**, click in the **File Name:** field and type *<errorfilename>*.
 - *<errorfilename>* is the full path for the file to be saved. It is possible to click on the **Browse . . .** button and click to select a file.
 - 6 To save the statistics or warnings to the named statistics/warning file, click on the **Save** button.
 - The file is saved.
 - 7 To submit the collection to the Data Dictionary, click on the **Update** button.
 - The collection is inserted.
 - 8 Click on the **Map Attributes/Keywords** tab.
 - The **Map Attributes/Keywords** screen is displayed.
 - 9 Click on the **Update All Collections** button.
 - The ECS collections are updated with the new mappings. (*Note:* This update may take several minutes.)
-

Troubleshooting DDMT Problems

The Data Dictionary Maintenance Tool (DDMT) is part of the ECS Data Management Subsystem (DMS), and uses database functions in that subsystem. If the tool cannot be launched, or does not function (e.g., cannot retrieve orders), you will need to ask the System Administrator to ensure that the Data Dictionary (DDICT) Server is functioning properly. It may be necessary to have the Database Administrator check to ensure that there are no problems with the database.

It is also possible to receive error messages when using the GUI while it is apparently functioning normally. Error messages associated with the DDMT are listed in Appendix A of the *Operations Tools Manual* (Document 609-CD-610-003, Table A.2.2-1). Table 4 is adapted from the corresponding table in Document 609. If a problem cannot be identified and fixed without help within a reasonable period of time, the appropriate response is to call the help desk or submit a trouble ticket in accordance with site Problem Management policy.

Table 4. ECS DDMT User Messages

Message Text	Impact	Cause/Corrective Action
Failed.	Cannot proceed with the subsequent and corresponding actions.	Operator action did not result in the desired program function. Check prior entries before action entries.
Can't undo.	Cannot cancel previous action.	Cancellation is not possible. No corrective action available.
The Query failed for all the collections.	Query cannot be performed.	Could not perform the query for all the collections. Check the DDICT server log files for possible connectivity or Sybase errors and, if indicated, contact the System Administrator or Database Administrator to correct identified problems. Then try again.
The Query failed for some of the collections.	Query cannot be completely performed..	Could not perform the query for some of the collections. Check the DDICT server log files for possible connectivity or Sybase errors and, if indicated, contact the System Administrator or Database Administrator to correct identified problems. Then try again.
The Query succeeded for all the collections.	N/A.	Informational message.
The Query succeeded for some collections.	N/A.	Informational message.
Error connecting to Data Dictionary Server.	Data Dictionary Server not connected.	Contact System Administrator/Operations Supervisor to ensure that the server is running and to check for connectivity problems.
Querying database.	N/A.	Informational message.
Updating database.	N/A.	Informational message.

Table 4. ECS DDMT User Messages (Cont.)

Message Text	Impact	Cause/Corrective Action
The update was successful.	N/A.	Informational message.
The update failed.	Database cannot be updated.	Updating the database did not work. Check the DDICT server log files for possible connectivity or Sybase errors and, if indicated, contact the System Administrator or Database Administrator to correct identified problems. Then try again.
No attribute has been specified.	No further action on attributes will occur.	Attributes are not specified. Specify the attributes and try again.
A valid value has not been specified.	No further action will occur.	A value was not specified. Specify a value and try again.
Unable to connect to Data Dictionary Server. Please try later.	Data Dictionary Server not connected.	Contact System Administrator/Operations Supervisor to ensure that the server is running and to check for connectivity problems.
The query matched no items in database.	N/A.	Informational message.
The query failed.	Query cannot be performed.	Could not perform the query. Check the DDICT server log files for possible connectivity or Sybase errors and, if indicated, contact the System Administrator or Database Administrator to correct identified problems. Then try again.
Unknown internal error.	The connection to the server is not available.	Contact System Administrator/Operations Supervisor to ensure that the server is running and to check for connectivity problems.
Cannot open valids file <valids filename>.	Valids file will not be available.	The valids file specified does not exist. Specify the correct valids file and try again.
Saved file <filename>.	N/A.	Informational message.
Data Dictionary updated.	N/A.	Informational message.
You have pending actions, which will be lost if you exit. Do you really want to exit?	Loss of pending actions.	Operator trying to exit before confirmation of database changes. Confirm before exiting.
Do you really want to exit?	Seeks confirmation.	Operator confirmation required before exiting. Confirm before exiting.
Unable to open specified file. Try another filename.	File specified will not be available.	The file specified by the operator cannot be opened. Specify correct file name and try again.

Table 4. ECS DDMT User Messages (Cont.)

Message Text	Impact	Cause/Corrective Action
You have made changes to <item name>, which will be lost if you proceed. Do you want to continue?	Loss of current changes.	Operator confirmation required before exiting the current action. Confirm before exiting.
Query failed.	N/A.	Database search resulted in no selections.
The query failed, possibly due to a server problem.	Connection to DDICT server not available.	Contact System Administrator/Operations Supervisor to ensure that the server is running and to check for connectivity problems.
Unable to open output file <filename>.	Output file not available.	Specified output file does not exist. Check for its presence. Create file if necessary and try again.
Not available <List of items not available>.	File is not available.	Configuration File Error. Contact System Administrator to ensure use of the correct Configuration File with all the entries required.
No file specified. Please select or type a file name.	File not available.	A filename has not been specified. Select the proper filename and try again.
<filename> does not exist. Please try again.	File not available.	File selected does not exist. Select a file that is present and try again.
Unable to access <filename>. Please try again.	File not available.	Cannot access the specified file. Check for the presence of the specified file.
<filename> is a directory. Please also specify a file.	File not available.	File selected does not exist. Specify a filename instead of the directory.
<filename> is not a proper file. Please try again.	File not available.	File selected is not proper. Specify a proper filename.
<filename> already exists and will be overwritten. Do you want to continue?	A file is overwritten.	Operator has used an existing filename. Use a different filename to avoid overwriting an existing file.
Value missing for required field. Please specify a value.	Cannot proceed with the action.	Improper entry in the desired field. Make a proper entry and try again.
Elements in valids section of data file not understood.	The data file is not usable.	The valids file is not correct. Use the proper valids file and try again.

Checking Data Dictionary Server Log Files

Log files can often provide information that will identify possible sources of disruption in Data Dictionary server function or communications, suggesting additional checks or actions that may help resolve the problem. The procedure for checking a log file starts with the assumption that the operator has logged in to ECS.

Checking Data Dictionary Server Log Files

- 1 To log in to the host for the server and log(s) to be examined, type `/tools/bin/ssh <hostname>` and then press the **Return/Enter** key.
 - For `<hostname>`, use `e0ins02` at EDC, `g0ins02` at GSFC, `l0ins02` at LaRC, and `n0ins02` at NSIDC.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type `yes` (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed `sshremote`, a prompt to **Enter passphrase for RSA key ‘<user@localhost>’** appears; continue with Step 2.
 - If you have not previously set up a secure shell passphrase; go to Step 3.
- 2 If a prompt to **Enter passphrase for RSA key ‘<user@localhost>’** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 4.
 - The prompt reflects the login to the selected host.
- 3 At the `<user@remotehost>`’s **password:** prompt, type your *Password* and then press the **Return/Enter** key.
 - The prompt reflects the login to the selected host.
- 4 Type `cd /usr/ecs/<MODE>/CUSTOM/logs` and then press the **Return/Enter** key.
 - The prompt reflects the change to directory `/usr/ecs/<MODE>/CUSTOM/logs`.
- 5 To view a server log, type `pg filename` and then press the **Return/Enter** key.
 - *filename* refers to the account management log file to be reviewed (e.g., `EcDmDictServer.ALOG`, `EcDmDictServerDebug.log`).
 - The first page of the log file is displayed; additional sequential pages can be displayed by pressing the **Return/Enter** key at the `:` prompt.
 - Although this procedure has been written for the `pg` command, any UNIX editor or visualizing command (e.g., `vi`, `more`, `tail`) can be used to review the log file.
 - Typically, the `<server>Debug.log` captures more detailed information than the `<server>.ALOG`. However, for some servers (e.g., `SDSRV`), there may be significant detail in the `<server>.ALOG`. It is also important to note that the `DebugLevel`

setting in the `<server>.CFG` file determines the level of detail captured in the `<server>Debug.log` (**0** is off, a setting of **1** captures status and errors, a setting of **2** captures major events, and a setting of **3** is a full trace recording of all activity). If the **DebugLevel** has been set to one of the lower levels during operations, the System Administrator may set it to **3** during troubleshooting.

- 6** Review the log file(s) to determine if there are any indications of connection problems or errors at start up.
 - The **EcDmDictServerDebug.log** file for the User Profile/User Registration server may contain an error message concerning **PF Init** error or problem (notify the System Administrator).
 - The **EcDmDictServer.ALOG** file may contain evidence of a Sybase error (e.g., **SybaseErrorCode1 =92014;SybaseErrorMessage1 ="x0ins01_srvr"** or **SybaseErrorCode2 =16;SybaseErrorMessage2 =""**) (notify the Database Administrator).
 - 7** To exit the **pg** review of the log file, type **q** at the **:** prompt and then press the **Return/Enter** key.
-

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Cross-DAAC Referral Processing

Sometimes a user may request your help in placing an order for data that are not available at your DAAC. Similarly, a User Services representative at another DAAC may receive a request for help in placing an order for data that are held at your DAAC, with the result that you receive a referred request.

Referral to Another DAAC

Suppose, for example, that User Services receives an E-mail request from Dr. Ima D. Geologist for help in finding Landsat images of an area in Africa from the NASA Landsat Data Collection. The User Services representative follows an established approach in response:

- User Contact Log record – document the request.
- User Profile – verify that the requester is a registered user.
- Data Search and Order tool – locate the requested data.

When the search results indicate that the data are held at the Earth Resources Observation System (EROS) Data Center (EDC), the User Services representative refers the request to that site. The referral is accomplished by

- forwarding the original E-mail request to User Services at EDC.
- adding some forwarding information to explain the origin of the request.
- including the preliminary search as a desktop object attached to the E-mail.
- including the original Contact Log Id record as an attachment to assist in any back-tracking that may be necessary.
- sending the requester an E-mail message explaining that the request for help has been forwarded to EDC and providing a contact name and phone number at EDC.

The action is completed by updating the User Contact Log record to document the referral, and, because there should be no requirement for further interaction between the home DAAC and the requester, closing the User Contact Log.

Receiving a Referral from Another DAAC

You may receive a cross-DAAC referral from a User Services representative at another DAAC who has received a request for help in locating and ordering data that is stored at your DAAC. In that case, you follow an established procedure that should seem familiar by now:

- User Contact Log record – document receipt of the referral.
- User Profile – verify for yourself that the requester is a registered user.
- Data Search and Order tool – locate the requested data.
- Review the E-mail – verify that the search is complete or add search parameters, contacting the user if more information is necessary.
- Submit the order.
- Update User Contact Log record – indicate completion of order; close the record.

Cross-DAAC Order Tracking

If a user has placed an order that required a cross-DAAC referral, there may arise a requirement for order tracking that involves more than one DAAC. For example, you may have referred an order to another DAAC, and if you receive a request for help from the user in tracking the status of the order, you may have to contact the other DAAC to provide the needed help. Similarly, you may be requested by another DAAC to provide the status of an order that has been referred.

Tracking to Another DAAC

Suppose you receive a request from Dr. Ima D. Geologist to provide the status of her order for Landsat Images. You may recall having referred the order to EDC, but you may not, or, if another User Services representative handled the initial request and referral, you may not know about it. Just as with any user contact, you follow established steps in providing the requested assistance:

- User Contact Log record – document the request.
- User Profile – verify that the requester is a registered user.

Now, however, if you do not recall or know about the referral, you may try to trace the order using the ECS Order Tracking Tool, without success because it is not pending in the system at your DAAC. The user has assured you that an order was placed. As a resourceful User Services representative, your next thought could be that the order has been fulfilled by your DAAC, and therefore has a status of completed. A reasonable check, then, is to examine the User Contact log records for a closed action related to the user's request. Use the following procedure.

Query User Contact Log

- 1 Launch the **User Contact Log** application GUI.
 - The **User Contact Log** defaults to the **Entry** screen.
- 2 Click on the **Query** field.
- 3 Click on the **Fields** button, highlight **Contact Name**, and release the mouse button.
 - The **Query** field shows '**Contact Name**'.
- 4 Click the = button.
 - The **Query** field shows '**Contact Name**' =.
- 5 Enter the **Contact Name**, using quotation marks (in this case, "**Geologist**").
 - The **Query** field shows '**Contact Name**' = "**Geologist**".

- 6 Click the **AND** button.
 - The **Query** field shows '**Contact Name**' = "**Geologist**" **AND**.
- 7 Click on the **Fields** button, highlight "**Log Status**," and release the mouse button.
 - The **Query** field shows '**Contact Name**' = "**Geologist**" **AND** '**Log Status**'.
- 8 Click the = button.
 - The **Query** field shows '**Contact Name**' = "**Geologist**" **AND** '**Log Status**' =.
- 9 Enter "'Closed'" (using quotation marks).
 - The **Query** field shows '**Contact Name**' = "**Geologist**" **AND** '**Log Status**' = "**Closed**".
- 10 Choose **List** from the **Query** menu (follow menu path **Query**→**List**).
 - A list box is displayed showing the User Contact Log records that match the Query conditions.
- 11 Highlight the desired record and follow menu path **Query**→**Display . . .**.
 - The **Entry** screen fields display the data for the selected record.
 - The **Comment Log** field displays the comment that the request was forwarded to another DAAC (in this case, EDC).

Responding to a Tracking Request from Another DAAC

Given that the Comment Log in the User Contact Log record indicates that the request was forwarded, the next step is to use the telephone or E-mail to contact the DAAC to which the request was forwarded to check on the status of the request. That DAAC will then proceed with established steps to determine the status of the order:

- User Contact Log record – update the record to document the current status check.
- User Profile – verify that the requester is still a registered user.
- ECS Order Tracking tool – check on the status of the user's data request.
- telephone or E-mail to the user – provide the status of the data request.
- telephone or E-mail to the original DAAC – permit closing of the User Contact Log record there.
- User Contact Log record – update the record to document that the status was provided.

ASTER Data Acquisition Request (DAR) Tool

At the EROS Data Center (EDC), User Services may receive requests from users for assistance with the ASTER Data Acquisition Request (DAR) tool or the On-Demand Form Request Manager, ECS client tools used in reference to ASTER data products and services. It is essential, therefore, that EDC User Services representatives be familiar with the tools, and be able to perform the functions necessary to create and submit a DAR, to create and submit a query to the XAR database, and to create requests for on-demand production of ASTER products.

Purpose of the ASTER DAR Tool

The ASTER DAR tool permits authorized users to submit DARs, or requests for scheduling data acquisitions by the Advanced Spaceborne Thermal Emissions and Reflection (ASTER) Radiometer. The requests are submitted through the ECS client to the ASTER Ground Data System (GDS), located in Japan. The ASTER GDS controls scheduling of the ASTER instrument and provides the collected data as level 1A and level 1B data to the EDC.

The ASTER DAR Tool User Interface

The ASTER DAR tool is a web application with four tabs, accessible through a web browser, as illustrated in Figure 56. When the ASTER DAR Tool is initially launched, a welcome dialog box for authorized users provides a short introduction concerning constraints on the request and the use of the ASTER instrument. A notice for unauthorized users, who may use the tool but not submit DARs, provides information about applying for authorization. When the user acknowledges the information, the tool opens with the first tab, called **Organizer**, selected. The **Organizer** tab contains a list of folders with the names of any DARs previously saved or submitted by the user, along with the date and time of submission.

The Project Folders area is intended to function as a file manager. In this area, DAR work that is stored locally (a hard drive or LAN) is displayed. This includes DAR requests upon which a user is still working, the parameters of DARs that have been sent, and the header data for DARs that have been returned from previous requests or DAR Database searches. It is intended that when a user selects a particular DAR, the Parameters field becomes populated with data entries that are relevant to the highlighted request.

If the user wishes to edit the contents of a DAR stored locally (i.e., finish an incomplete DAR that was saved or edit a previous DAR for which the parameters had been saved), the user can select the desired item from the Project Folders list by clicking on it. The action will cause all parameters stored for the highlighted item to populate the appropriate fields in the "Create/Edit Request" tab where the user can inspect and/or edit them.

The Organizer tab includes buttons for several functions related to managing folders, DARs, and searches. The last button is for attaching a data processing request to a selected DAR. This button is not used.

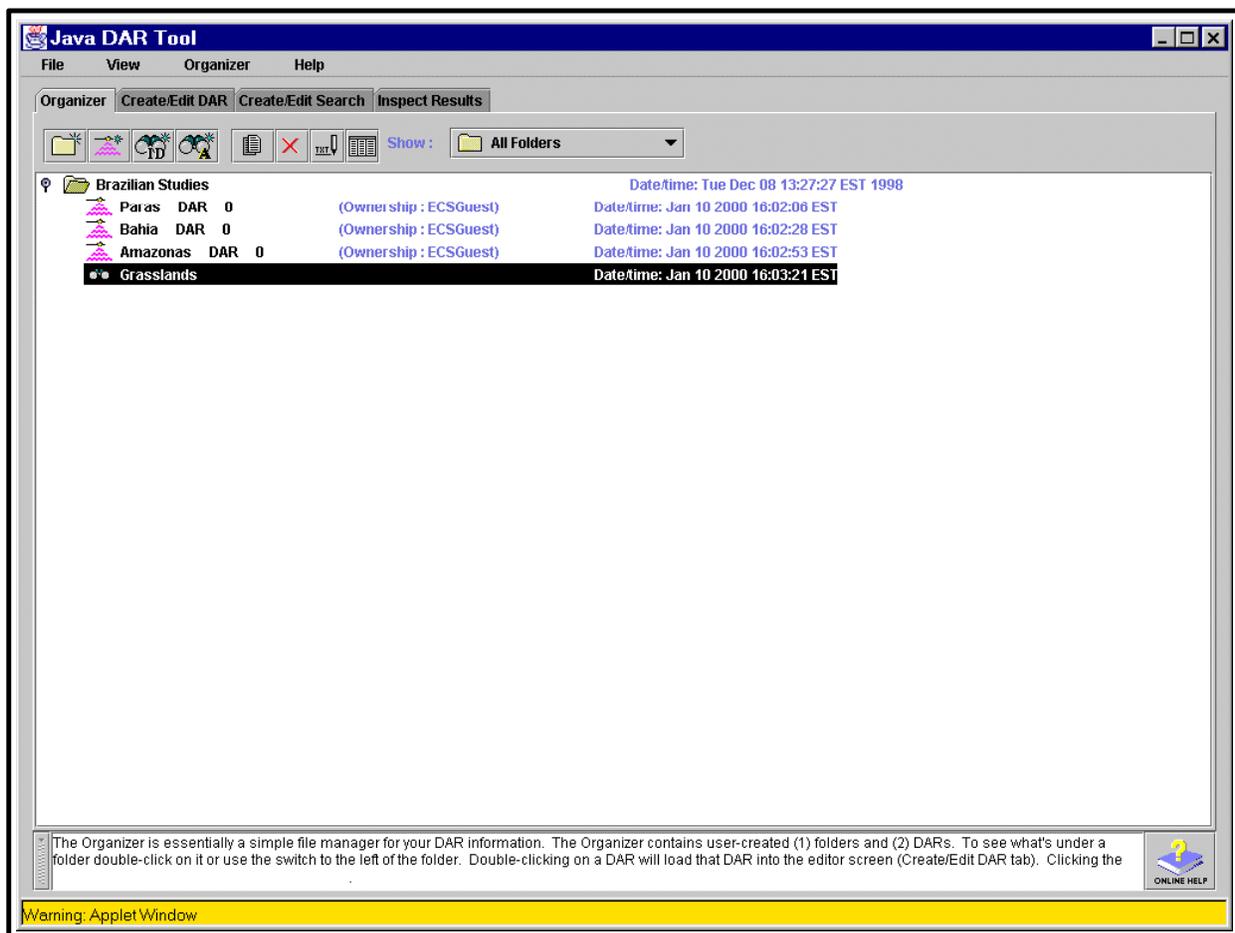


Figure 56. ASTER Data Acquisition Request (DAR) Tool Organizer Screen

Create/Edit DAR

To edit the parameters, or to create a new DAR, the user clicks on the **Create/Edit DAR** tab, bringing up the screen shown in Figure 57. This screen provides access through nested tabs to all the functions necessary to create a new DAR or to edit existing DAR parameters (i.e., **General**, **Spatial**, **Temporal**, **Coverage**, **Geometry**, and **Priority**). General, Spatial, and Temporal requirements must be entered to complete a DAR. Other options are not required. A user visits one of these screens, makes entries or edits, and accepts the changes in that screen by clicking on the **Update DAR >>>** button. This makes the information available for display in the DAR Summary window at the right side of the form; to display the information, the user clicks on the toggle icon for the relevant category.

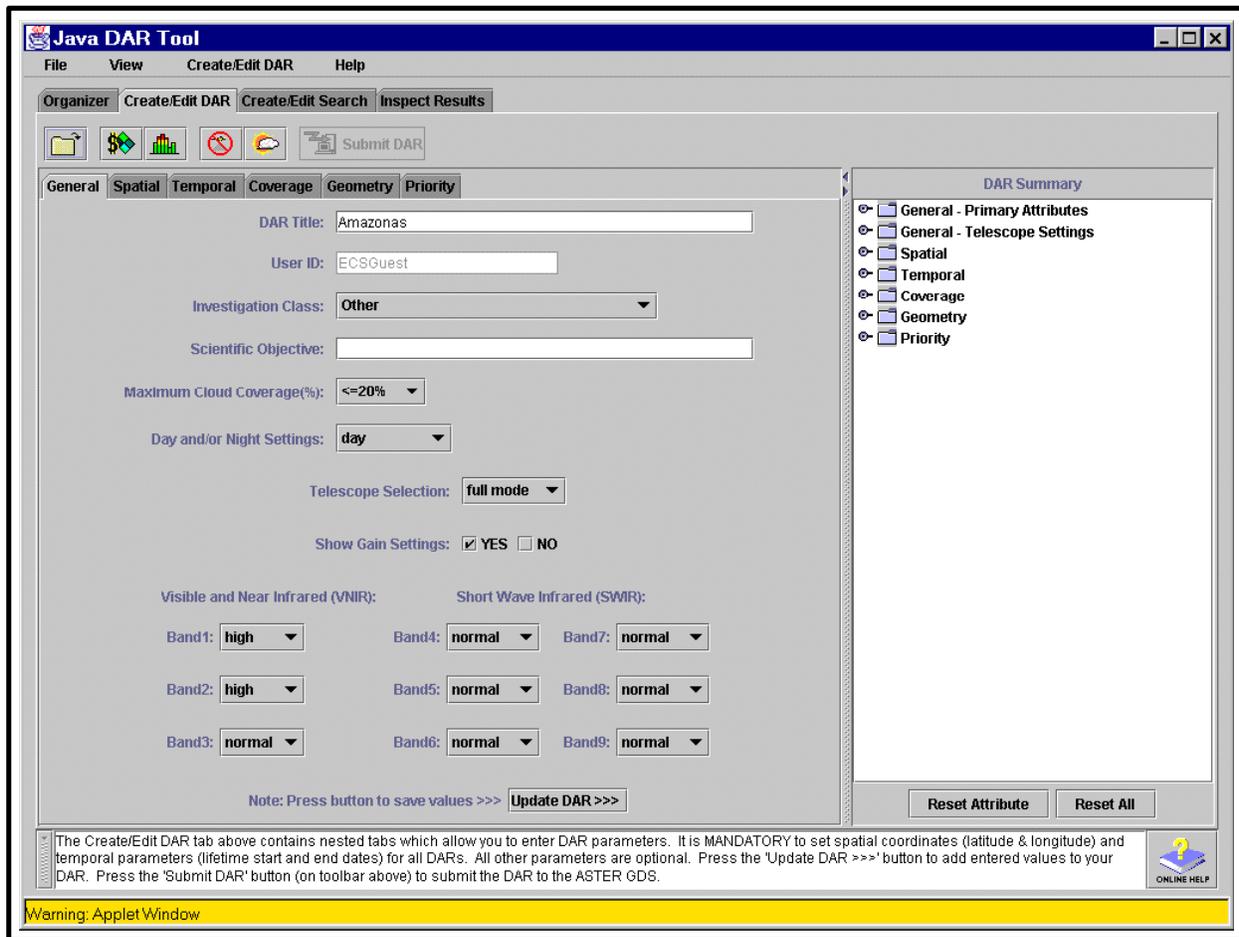


Figure 57. ASTER DAR Tool Create/Edit DAR General Tab

The **Create/Edit DAR** screen General tab permits naming the DAR and providing other information to characterize the request. It also permits selection of one or a combination of the telescopes that are part of the ASTER instrument. The three telescopes are:

- VNIR (Visible and Near-Infrared spectrum).
- SWIR (Short-wave and Infrared spectrum).
- TIR (Thermal Infrared spectrum).

Five possible selections are available through activation of an option button:

- Full Mode -- The full activation of the all bands of the VNIR, SWIR, and TIR telescopes together.
- VNIR -- The activation of all bands of the VNIR telescope only.
- VNIR Stereo -- The activation of the V3N & V3B bands (a stereo pair) of the VNIR telescope. In this mode, V1 and V2 are not activated.
- SWIR and TIR -- The activation of all bands of the SWIR and TIR telescopes. In this mode, no bands of the VNIR telescope are activated.
- TIR -- The activation of the TIR telescope only. In this mode, no bands of the VNIR and SWIR telescopes are activated.

The user may click to choose to display or not to display **Gain Settings** for the available bands of each telescope. For each band of the VNIR telescope, the user can use the option button to select high, normal, or low gain settings. For each band of the SWIR telescope, the user can use the option button to select high, normal, low, or very low gain settings. These option buttons are desensitized when the telescope to which the affected bands belong is not selected. Selections on the tab are recorded by clicking on the **Update DAR >>>** button.

Spatial Requirements

Clicking on the **Spatial** nested tab on the **Create/Edit DAR** tab displays the screen shown in Figure 58. The **Spatial** nested tab allows the user to define an Area of Interest (AOI) on the displayed map and specify coverage criteria such as sampling, cross track fragmentation and area of interest duration for the query. The user can click to select zoom levels from a global view down to a view displaying less than one scene on the map. A panning function allows re-centering the map to any selected point on the display.

The user can click on an icon to enable selection of an **Area of Interest Polygon**. This allows the user to click on four geographic points in sequence to define a polygon on the map. The user may also elect to display a dialog box for display/entry of the Area of Interest Lat/Long Coordinates, as illustrated on the right side of Figure 58. This dialog displays the coordinates as they are selected on the map, or may be used to enter precise coordinates. Clicking on the **Update DAR >>>** button on the **Create/Edit DAR** tab completes entry of the spatial requirements.

Just above the right top corner of the map appears a display providing a resource estimate. Each ASTER user is allocated a set amount of ASTER resources. Before submitting a new DAR, a user should check to see that this new DAR does not consume more resources than might be desirable. The resource total used by a new DAR is calculated by multiplying the area of the AOI (or 3600 km², whichever is larger) by the number of repeat observations requested. The resource estimate display is provided as a convenience to the user.

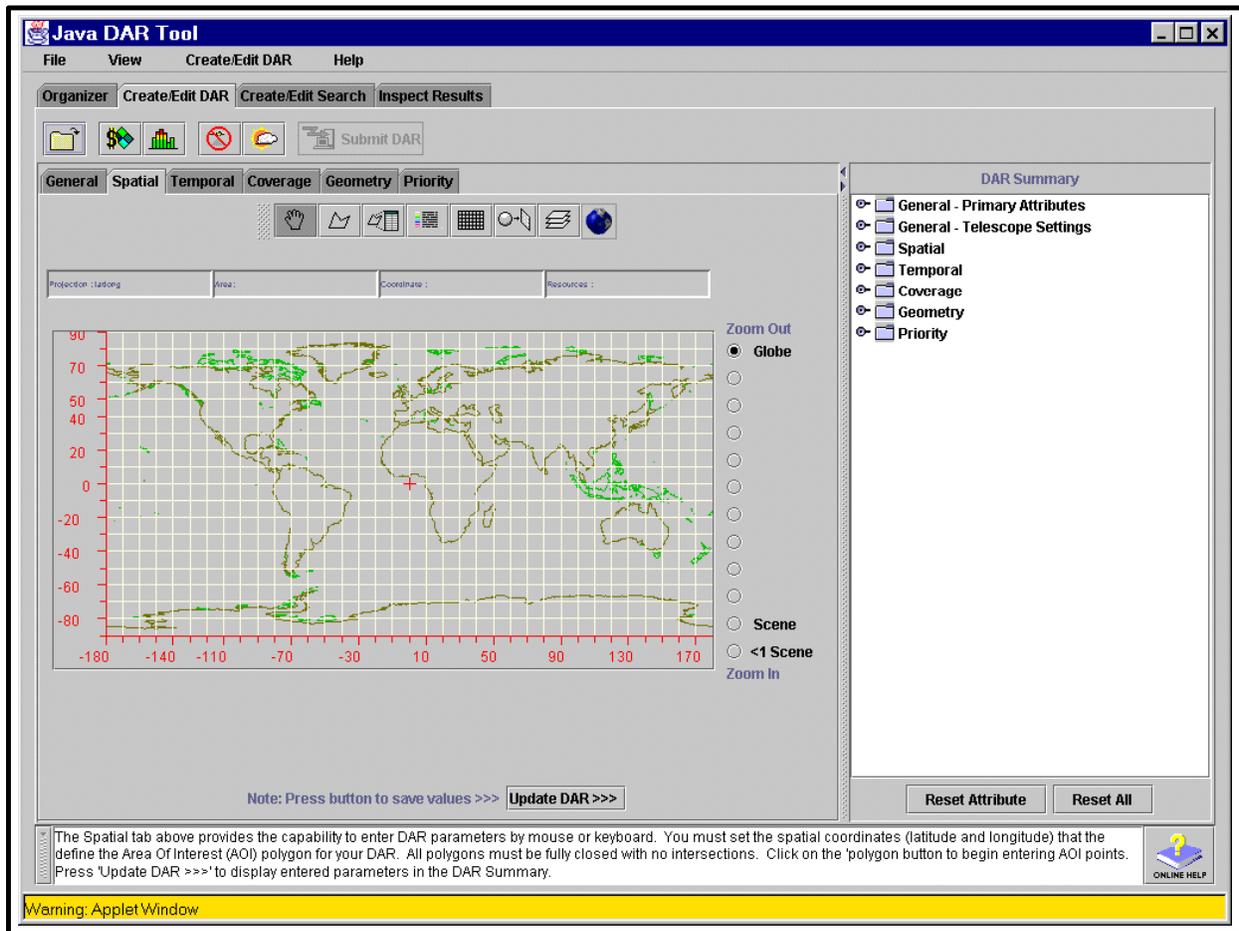


Figure 58. ASTER DAR Tool Create/Edit DAR Spatial Tab

Temporal Requirements

Clicking on the **Temporal** nested tab displays the screen shown in Figure 59. The **Temporal** tab allows the user to select the times at which observations for a specific DAR are to occur. First, the user must enter the begin and end dates for the DAR Lifetime (the time over which all observations for the DAR are taken). The next two parameters, "repeat interval" and "acquisition window" are somewhat interdependent. If the user decides that it is not necessary to have a steady stream of data about a particular AOI, but wants image data from the same AOI at regular time intervals, then the user must use the repeat interval and acquisition window controls to specify the number of evenly spaced intervals or the duration of time between the starts of evenly spaced intervals and the duration of those intervals. Clicking on the **Update DAR >>>** button on the **Create/Edit DAR** tab completes entry of the temporal requirements.

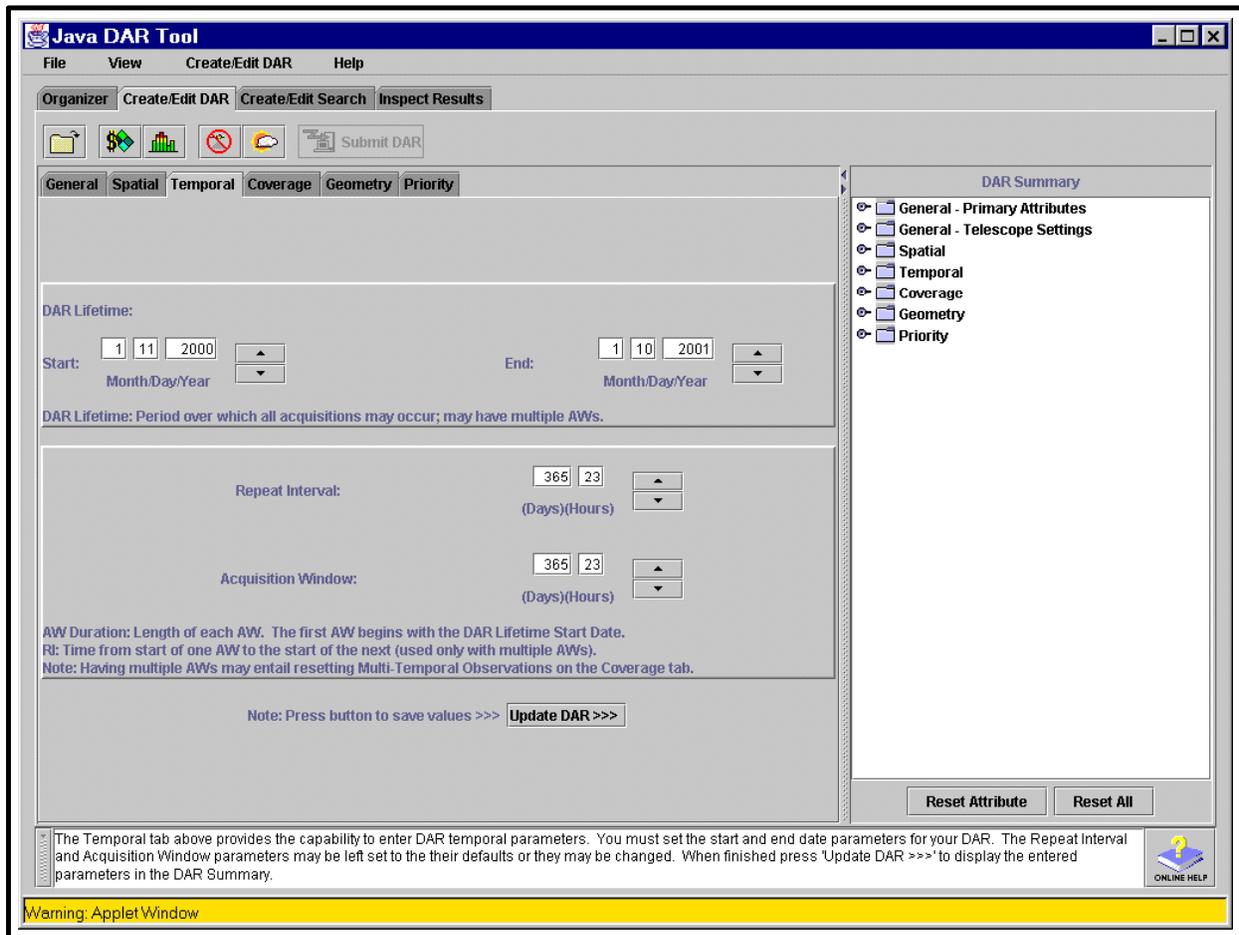


Figure 59. ASTER DAR Tool Create/Edit DAR Temporal Tab

Optional Screens

Two other screens of the ASTER DAR Tool provide capability for the user to specify additional requirements for the ASTER data acquisition request. Clicking on the **Geometry** nested tab displays the screen shown in Figure 60. The **Geometry** tab allows the user to specify an Acceptable Sun Angle Range and either the Look Angle or View Swath (at a preset look angle) for the query. The user may specify an instrument Look Angle in degrees relative to nadir or select a View Swath from up to 7 possible choices, or alternatively, specify an Acceptable Look Angle Range. For the Sun Angle and Look Angle, minimum and maximum degree angles can be specified. This is done by either numeric text entry or by using the arrow buttons to the right of the text field to set numeric values within the field. Clicking on the **Update DAR >>>** button on the **Create/Edit DAR** tab completes entry of the geometry requirements.

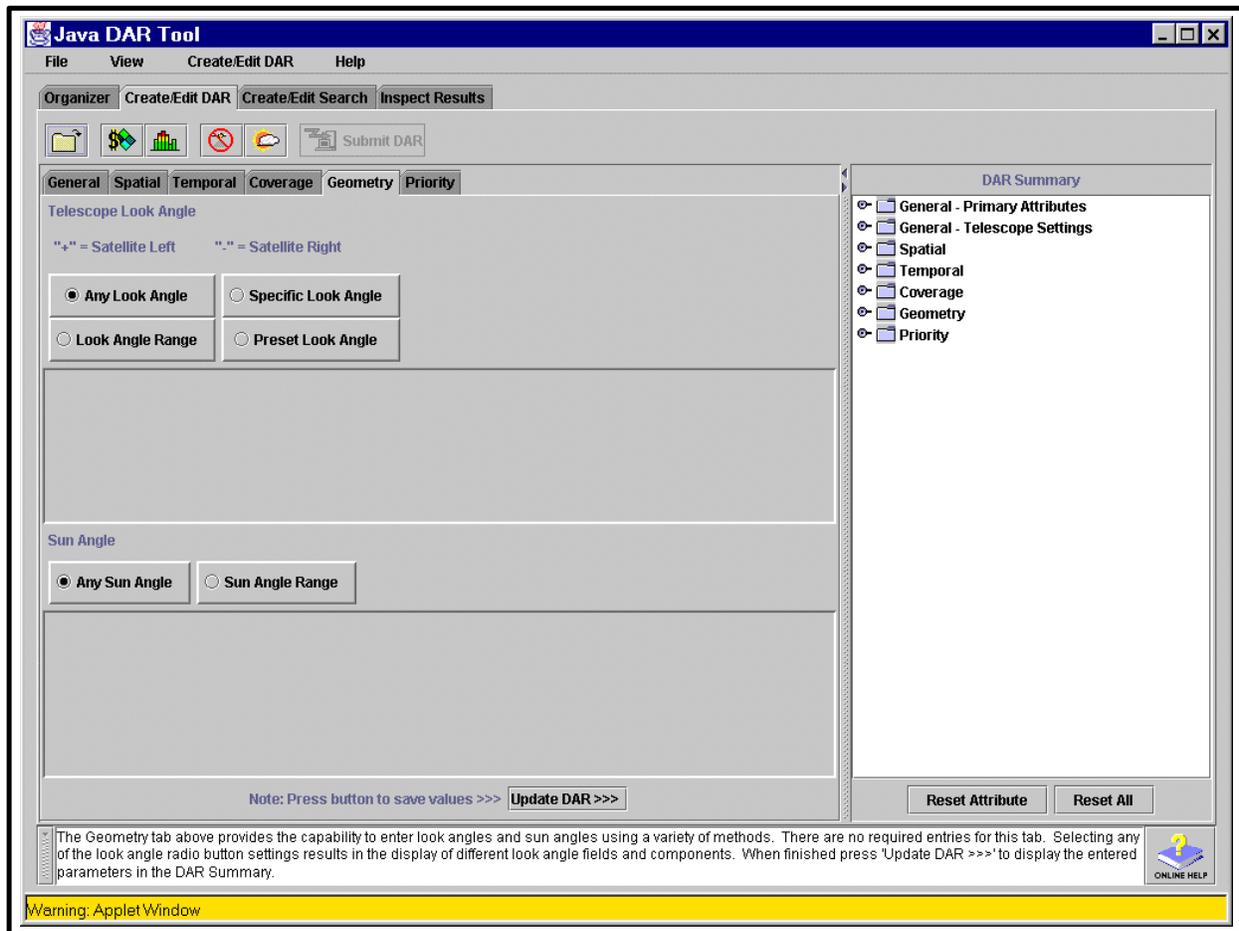


Figure 60. ASTER DAR Create/Edit DAR Geometry Tab

Clicking on the **Priority** tab displays the screen shown in Figure 61. The **Priority** tab allows the user to identify any need and justification for special treatment of the request being prepared. Here the user can note any planned Ground Campaign (signifying a need to assign priority to the request to assure collection of data by satellite concurrent with data collection by scientists on the ground), identify any implementation urgency for the request, or request that the delivery of data be expedited. Text areas are provided to permit entry of appropriate justification for these special requests. Clicking on the **Update DAR >>>** button on the **Create/Edit DAR** tab completes entry of the priority requirements.

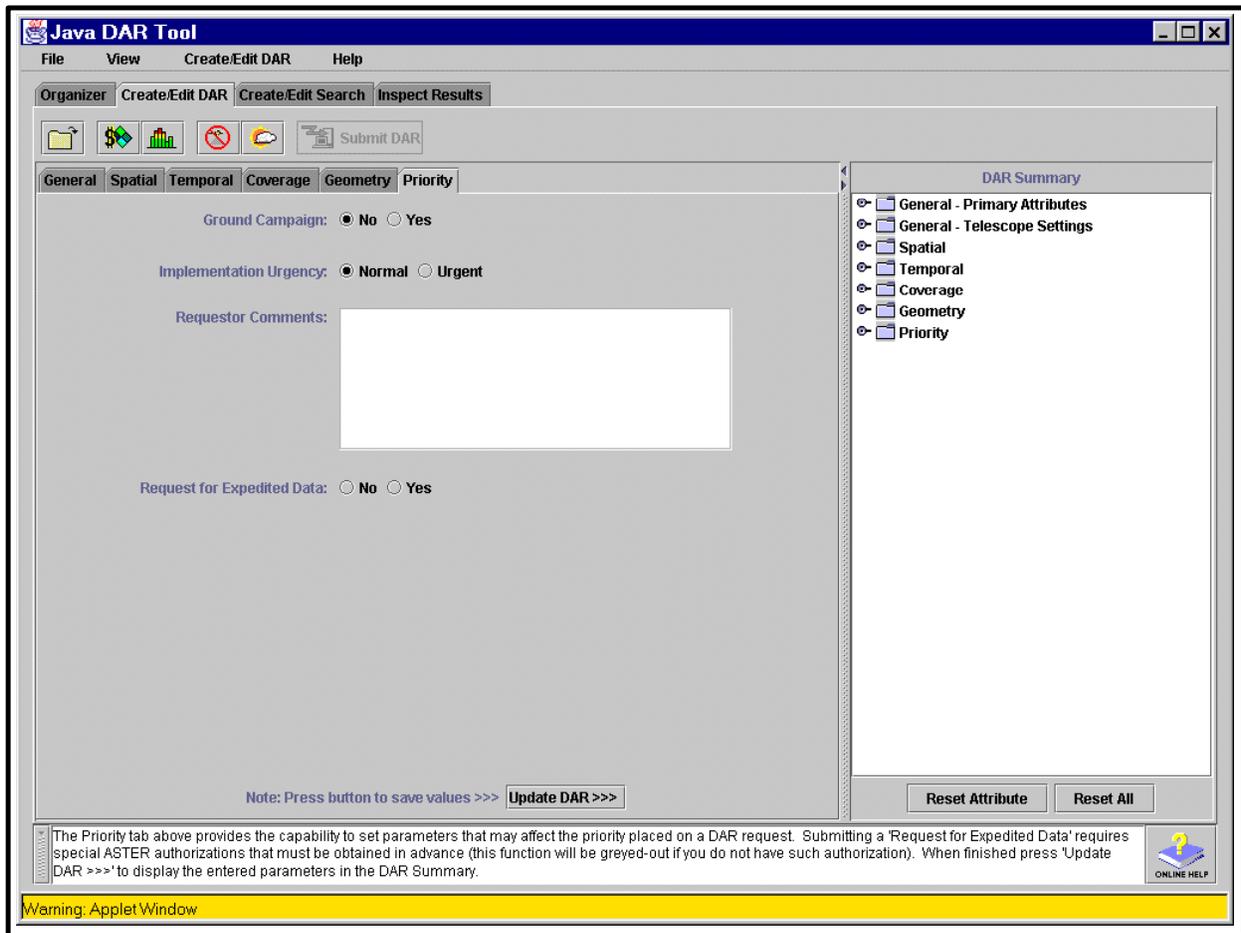


Figure 61. ASTER DAR Tool Create/Edit DAR Priority Tab

Clicking on the **Submit DAR** button on the **Create/Edit DAR** screen initiates the submission of the request. However, if the user has not made entries for all of the mandatory requirements of the ASTER DAR Tool, a warning dialog informs the user of the items for which parameters or data have not been entered and asks whether to submit the request anyway. If the user elects to continue the submit operation and the mandatory DAR request parameters have been supplied, a DAR ID is returned from Ground Data System several seconds later, in a dialog like that shown in Figure 62.

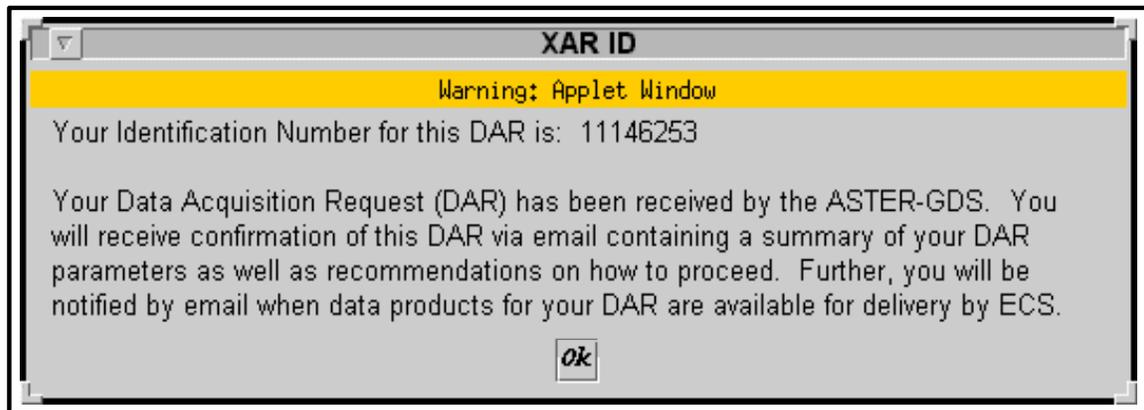


Figure 62. DAR Identification Dialog

The following procedure illustrates an example DAR preparation and submission for collection of thermal infrared imagery in a selected geographic area.

Prepare and Submit a Data Acquisition Request (DAR)

- 1 Access the command shell
 - The command shell prompt is displayed.
- 2 At the UNIX command shell prompt, type **setenv DISPLAY *clientname*:0.0** and then press the **Return/Enter** key.
 - For *clientname*, use either the local terminal/workstation IP address or its machine name.
- 3 Start the log-in to the client server by typing **/tools/bin/ssh *hostname*** (e.g., e0ins02, g0ins02, l0ins02, n0ins02), at the UNIX command shell prompt, and press the **Return/Enter** key.
 - If you receive the message, **Host key not found from the list of known hosts. Are you sure you want to continue connecting (yes/no)?** type **yes** (“y” alone does not work).
 - If you have previously set up a secure shell passphrase and executed **sshremote**, a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears; continue with Step 4.
 - If you have not previously set up a secure shell passphrase; go to Step 5.
- 4 If a prompt to **Enter passphrase for RSA key '<user@localhost>'** appears, type your *Passphrase* and then press the **Return/Enter** key. Go to Step 6.
- 5 At the **<user@remotehost>'s password:** prompt, type your *Password* and then press the **Return/Enter** key.
- 6 Type **netscape** and then press the **Return/Enter** key.
 - The **Netscape** browser window is displayed.

- 7 Type the entry for the ASTER DAR Tool (ADT) Uniform Resource Locator (URL) (http://e0ins02.ecs.nasa.gov:10402/JDTApplet_plugin.html) directly into the **Location:** field, and then press the **Return/Enter** key.
 - A Netscape: The ASTER DAR Tool window is displayed.
 - A Java Console dialog box with scrolling information is displayed.
 - A dialog box is displayed with **Username:** and **Password:** fields.
 - *Note:* If you have not loaded the latest Java plugin for your browser, you will be prompted to do so. Download the plugin and follow the instructions. On UNIX, run `<(sh plugin_file_name.sh)>` on the plugin file and answer the questions. Once the plugin is installed, restart the browser.
- 8 Click on the **Username:** field and type `<DAAC_login_name>`, click on the **Password:** field and type `<DAAC_password>`, and then click the **OK** button or press the **Return/Enter** key.
 - *Note:* An ECS DAAC account username and password allowing submission of a DAR must be created prior to performing this procedure. As an alternative, it is possible to access the ASTER DAR tool as "ECSGuest" to explore how most of the screens work, but it will not be possible to submit a DAR or receive a DAR ID.
 - A ASTER DAR tool "Welcome to the Data Acquisition Tool" dialog is displayed, with introductory information to the user. If the login is as "ECSGuest," the information indicates that submission of a DAR is not authorized, and information is given on how to apply for authorization.
- 9 Click on the **OK** button in the "Welcome" dialog box.
 - The dialog box is removed.
 - A large new window, **The ASTER DAR Tool** window, is displayed, with the **Organizer** tab as the default, showing a list of folders and the names of any previously saved or submitted DARs.
- 10 Click on the **Create/Edit DAR** tab.
 - The **Create/Edit DAR** functions are displayed, with the **General** nested tab displayed as default and **Untitled xAR** showing as the default in the **XAR Title:** field.
- 11 Highlight the title **Untitled xAR** in the **XAR Title:** field and type **JDARC/O_<date>**.
 - The typed title appears in the **XAR Title:** field.
- 12 Click on the arrow to the right of the **Investigation Class:** field.
 - A pop-up window displays valid classes.

- 13 Click on **Soils** in the pop-up window.
 - The pop-up window disappears and the selection (**Soils**) is displayed in the **Investigation Class:** field.
- 14 Click in the **Scientific Objective:** field and type a scientific objective.
 - *Note:* Information to be entered in this field should be obtained from the scientist for whom the DAR is being created.
- 15 Verify that the **Maximum Cloud Coverage** is <20% (if necessary, click on the option button to display a pop-up window and, holding down the left mouse button, drag the cursor to select <20%).
 - The selected value is displayed on the option button.
- 16 Click on the option button for **Telescope Selection** and, holding down the left mouse button, drag the cursor to select **TIR Only**.
 - The selection is displayed on the option button.
- 17 Click on the **Update DAR >>>** button at the bottom of the window.
 - A dialog box is displayed with a field for naming the new DAR, and showing **Copy of JDARC/O_<date>** as the default name.
- 18 Highlight the words **Copy of** in the **New Name:** text entry field and press the **Delete** key.
 - The name **JDARC/O_<date>** is displayed in the field.
- 19 Click on the **OK** button of the **New Name** dialog box.
 - The **New Name** window is removed and the parameters are saved.
 - *Note:* The new values of parameters may be observed by clicking on the **Primary Attribute** toggle icon in the **DAR Summary** window on the right side of the form.
- 20 Click on the **Spatial** nested tab.
 - The **Spatial** nested tab is displayed with a map showing no designated areas of interest (AOIs).
- 21 Click on the **AOI Mode** button.
 - *Note:* A button name is displayed when the cursor is moved over the button. The **AOI Mode** button is the one with the irregularly-shaped polygon icon.
 - The button is displayed in the depressed position.
- 22 Move the cursor into the map area.
 - The cursor changes to the crosshairs shape when moved into the map area.

- 23 Click on the **View Coordinates** button (just to the right of the **AOI Mode** button).
- A **View Coordinates** dialog box is displayed with no lat/long coordinates entered.
 - Add four points to the map by clicking on the map four times to form a small, four-sided polygon.
 - Four points are displayed on the map, connected with red lines.
 - Lat/long coordinates for the selected points are displayed in the **View Coordinates** box. *Note:* An AOI may be created with precise coordinates by entering the coordinates in the **View Coordinates** box instead of clicking the points on the map.
- 24 Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Spatial** heading.
- 25 Click on the **Temporal** nested tab
- The **Temporal** nested tab is displayed.
- 26 In the **XAR Lifetime:** area, highlight one of the numbers in the **Begin** field and use the arrow keys or type an entry to specify a desired number; then do the same for other numbers in the **Begin** field until the desired beginning date is identified.
- *Note:* The fields represent Month, Day, and Year. For this exercise, change the date to the **current date plus one day**.
 - The **Begin** date is displayed as the current date plus one day.
- 27 In the **XAR Lifetime:** area, highlight one of the numbers in the **End** field and use the arrow keys or type an entry to specify a desired number; then do the same for other numbers in the **End** field until the desired ending date is identified.
- *Note:* The fields represent Month, Day, and Year. For this exercise, change the date to the **current date plus ten days**.
 - The **End** date is displayed as the current date plus ten days.
- 28 Click on the **Repeat Interval (Days)** field and use the arrow keys or type an entry to change the number to the desired number of days for the repeat interval.
- For this exercise, change the number to **2** days.
 - The numeral **2** is displayed in the **Repeat Interval (Days)** field.
- 29 Click on the **Update DAR >>>** button.
- The changed spatial parameters are updated in the DAR Summary display area under the **Temporal** heading.

30 (See important note below!) On the **Create/Edit DAR** tab, click on the **Submit DAR >>>** button.

- **Note - Important:** If you are logged in with authorization to submit a DAR, for this training exercise you must check with the System Administrator to ensure that this JDAR will be sent to the local simulator unless prior coordination has been made with ASTER. The IP address and port are set in the EcGwDARServer.CFG file on the CSS primary server (e0ins01).
- A confirmation dialog box is displayed with the information that "The DAR is about to be submitted to GDS."

31 To confirm the DAR submit action, click on the **Yes** button in the warning box.

- The confirmation dialog box is removed.
- The ASTER reply **XAR ID** dialog box is displayed.

32 Click on the **OK** button in the **XAR ID** dialog box.

- The **XAR ID** dialog box is removed and the **ASTER DAR Tool** window is displayed as the active window.
- The user receives email confirming that the DAR was received and containing a subscription ID.

33 To exit from the **ASTER DAR Tool**, select the **Netscape** window; then follow menu path **File→Exit**.

- The **ASTER DAR Tool** windows and the browser window are removed.

Modifying a DAR

After a DAR has been submitted and prior to its fulfillment, it is possible to submit a modification for limited changes to the request. The modification is accomplished by selecting a DAR on the **Organizer** tab and then selecting one of only two permitted modifications. One permitted modification is to specify a less restrictive maximum cloud cover that will be tolerated (it is not possible to specify a lower percentage for maximum cloud cover than submitted for the original request). This selection is accomplished by selecting the new percentage on an option button in a dialog box.

The second permitted modification is to change the status of the DAR. You may change the status of an active request from **Active** to **Suspended**, or change the status of a suspended request from **Suspended** to **Active**. That is, a DAR will not be removed from the system, but it may be suspended indefinitely if the data is no longer wanted, or a suspended DAR may be reactivated. The desired status is selected by clicking on a button in a dialog box. Modifications are acknowledged by the ASTER GDS.

Search/Status a DAR

The ASTER DAR Tool permits a user to search for an existing DAR in the XAR database in Japan, using the **Create/Edit Search** tab illustrated in Figure 63. The screen permits search by DAR ID or by attribute. In a search by attribute, sub-tabs similar to those on the **Create/Edit DAR** tab permit specification by General, Spatial, Temporal, Geometry, Priority, or other attributes.

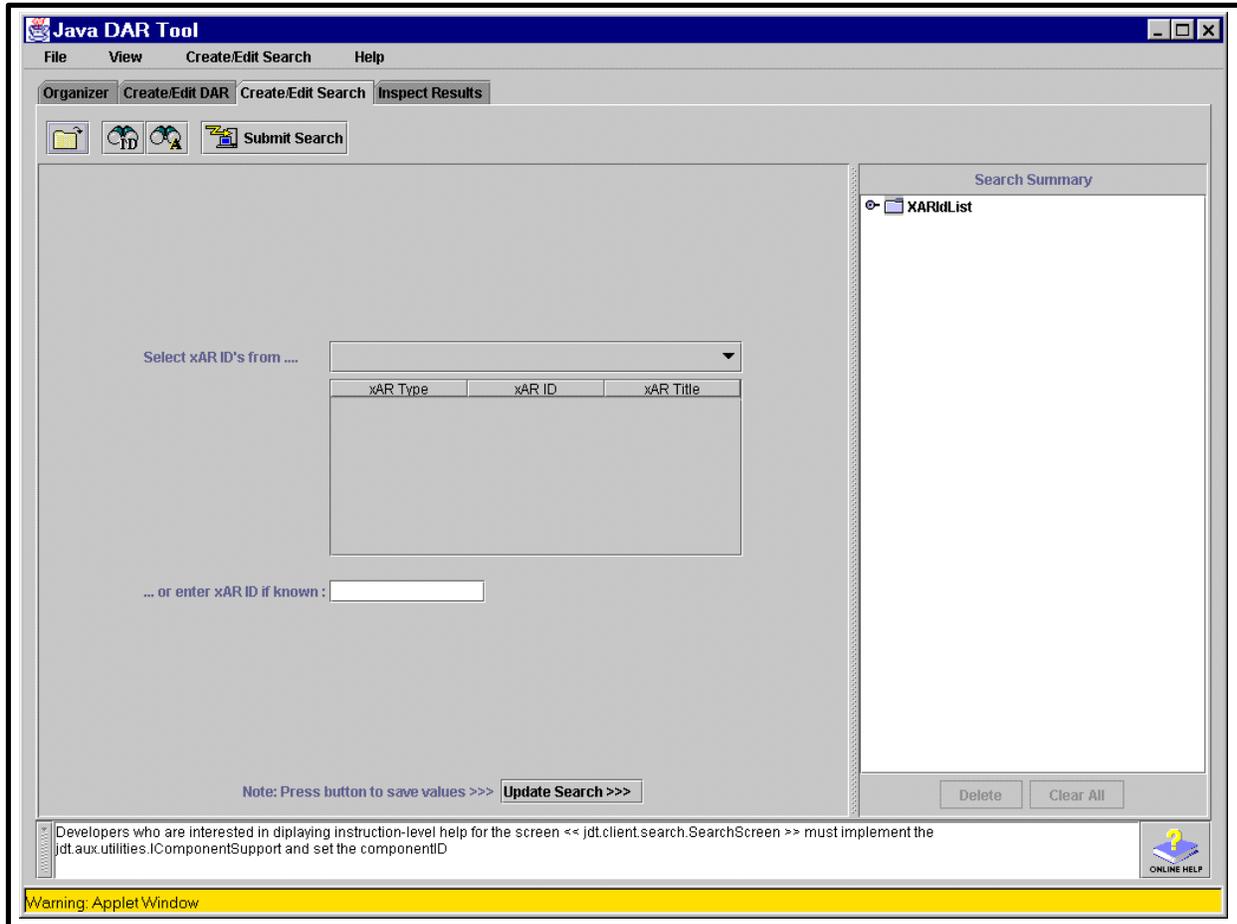


Figure 63. ASTER DAR Tool Create/Edit Search Tab

Inspecting Search Results

The results of a search of the XAR database may be inspected using the **Inspect Results** tab illustrated in Figure 64. As the figure shows, the results are returned as a list of titles, DAR IDs, and a set of associated parameters.

The tool provides several ways of examining the results. User may select one or more DARs from the list and view them in different ways:

- Textually.
- Graphically.
- By Area of Interest (AOI) within the selected Area of Search (AOS).
- By the search parameters that produced the result.

The user may create a template DAR using the parameters from one of the results to submit a new DAR. The user may also view acquired scenes from a selected result, either graphically or by AOI within AOS.

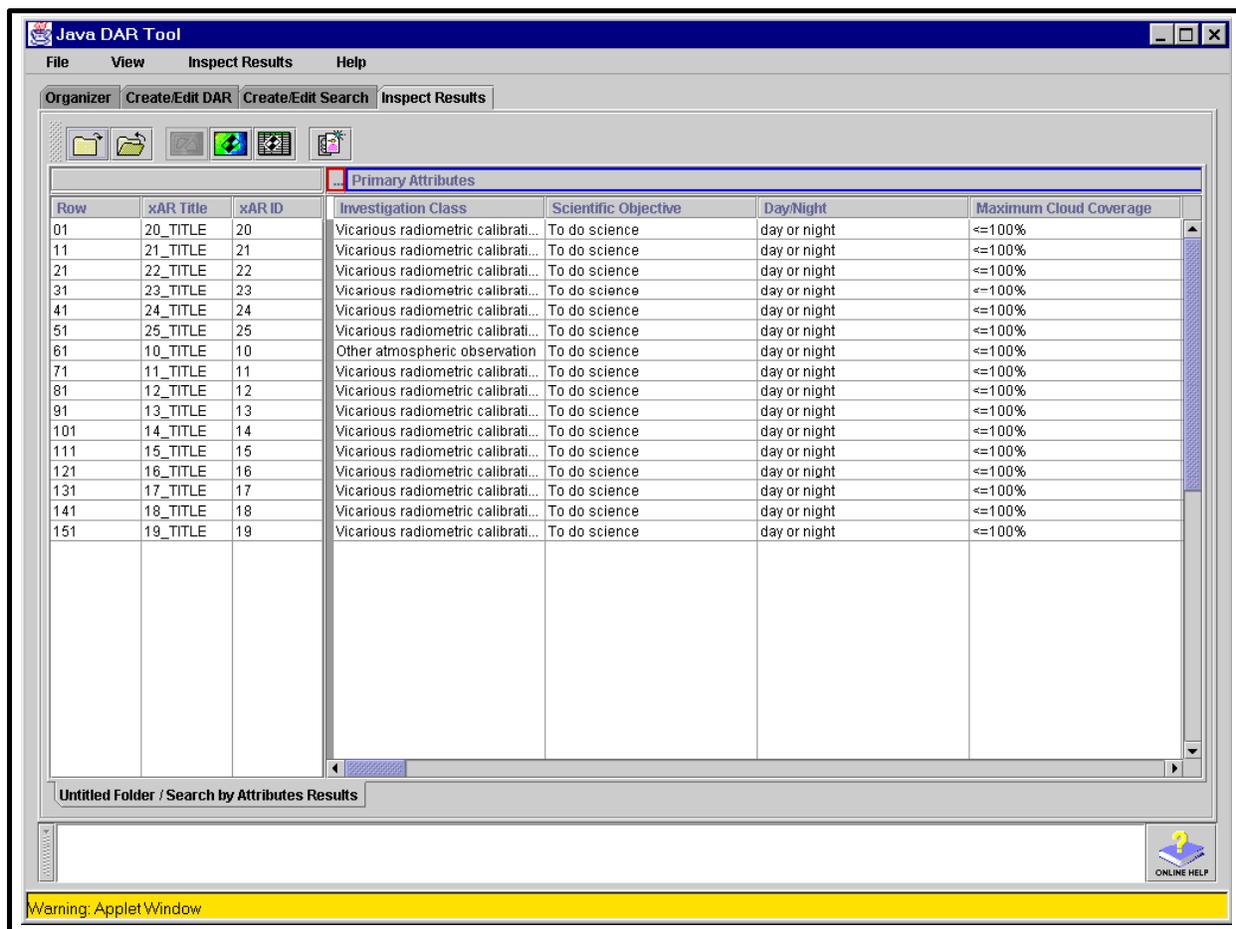


Figure 64. ASTER DAR Tool Inspect Results Tab

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On-Demand Product Requests

Users can use an HTML interface to submit requests for the creation of ASTER high-level products, including, if the user is authorized, Digital Elevation Models (DEMs), and non-standard Level 1B products. For those users who need the authorization, it is granted using the User Registration GUI as part of the user registration process. To provide these on-demand products, the EOS Data Gateway and the Planning, Data Processing, and System Management Subsystems of ECS at the EROS Data Center (EDC) include specific support capabilities.

- EOS Data Gateway (EDG), which is the data search and order tool, is configured to collect the user-specified parameters for the ASTER on-demand request.
- Planning (PLS) provides a server, the On-Demand Product Request Manager (ODPRM), for creating and queuing on-demand production requests.
- Data Processing (DPS) updates the status for high-level processing of on-demand requests.
- System Management Subsystem (MSS) includes on-demand requests in its Order Tracking Database and Data Order Tracking Tool.

User Services at EDC may be called upon to assist users in use of the EDG for submitting on-demand processing requests, and to use the Data Order Tracking Tool to provide the status of on-demand product requests or cancel them. A prior section of this lesson addressed the use of the EDG tool in searching and ordering data. To create an on-demand processing request, a user uses the EDG to conduct a search for appropriate input data (e.g., AST_L1B granules); any appropriate granules for which on-demand processing is available will show the higher-level data products among the ordering options. Figure 65 illustrates an example EDG results listing obtained in a search for AST_L1B data.

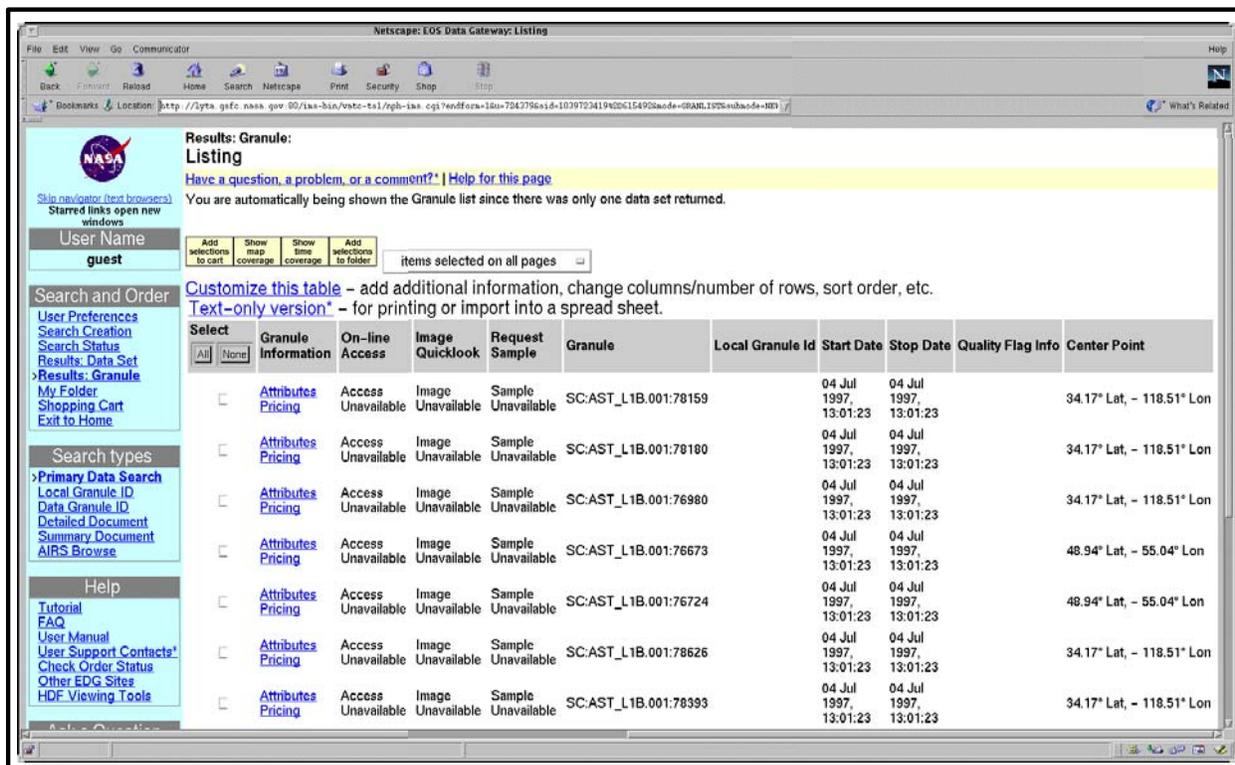


Figure 65. Example EDG Results Listing of AST_L1B Granules

On the results listing illustrated in Figure 65, the user selects one or more granules for which on-demand processing is desired to obtain a higher-level data product and adds the granule(s) to the “shopping cart.” This action displays the Data Quality Summary window illustrated in Figure 66. The Data Quality Summary window provides a description of the data type of the selected granule(s) and permits the user to proceed to the shopping cart.

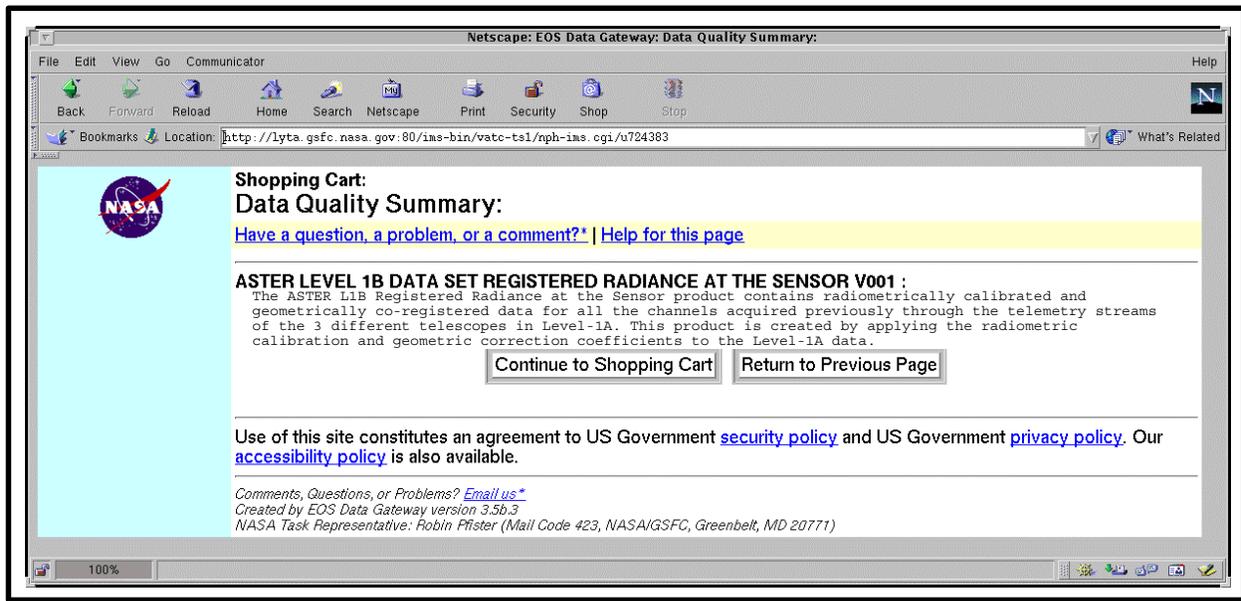


Figure 66. EDG Data Quality Summary window

The user continues to the Shopping Cart window, shown in Figure 67. This first Shopping Cart window is identified as **Step 1: Choose Ordering Options**.

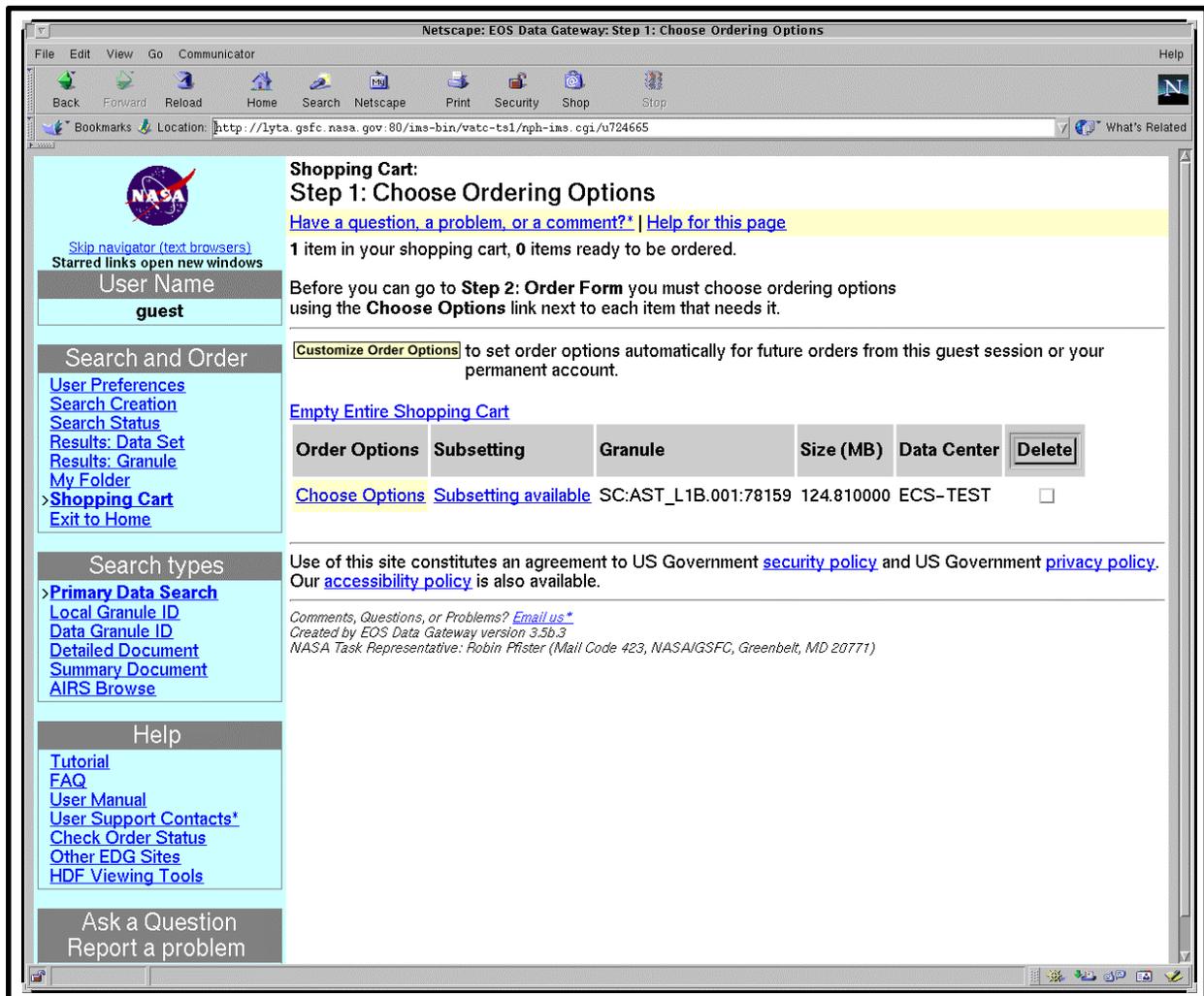


Figure 67. EDG Shopping Cart: Go to Step 1: Choose Ordering Options

At the **Step 1: Choose Ordering Options** window, the user clicks on the **Choose Options** link to proceed to the ordering options selection window illustrated in Figure 68. The Shipping Information window permits selection of the means by which the product will be transferred, using selection buttons to the left of the choices. A reset button is provided to restore the default selection. *Note:* If the on-demand product is a Level 1B product from the ASTER GDS in Japan, there is no electronic distribution. The product is delivered on D3 tape to the EDC DAAC.

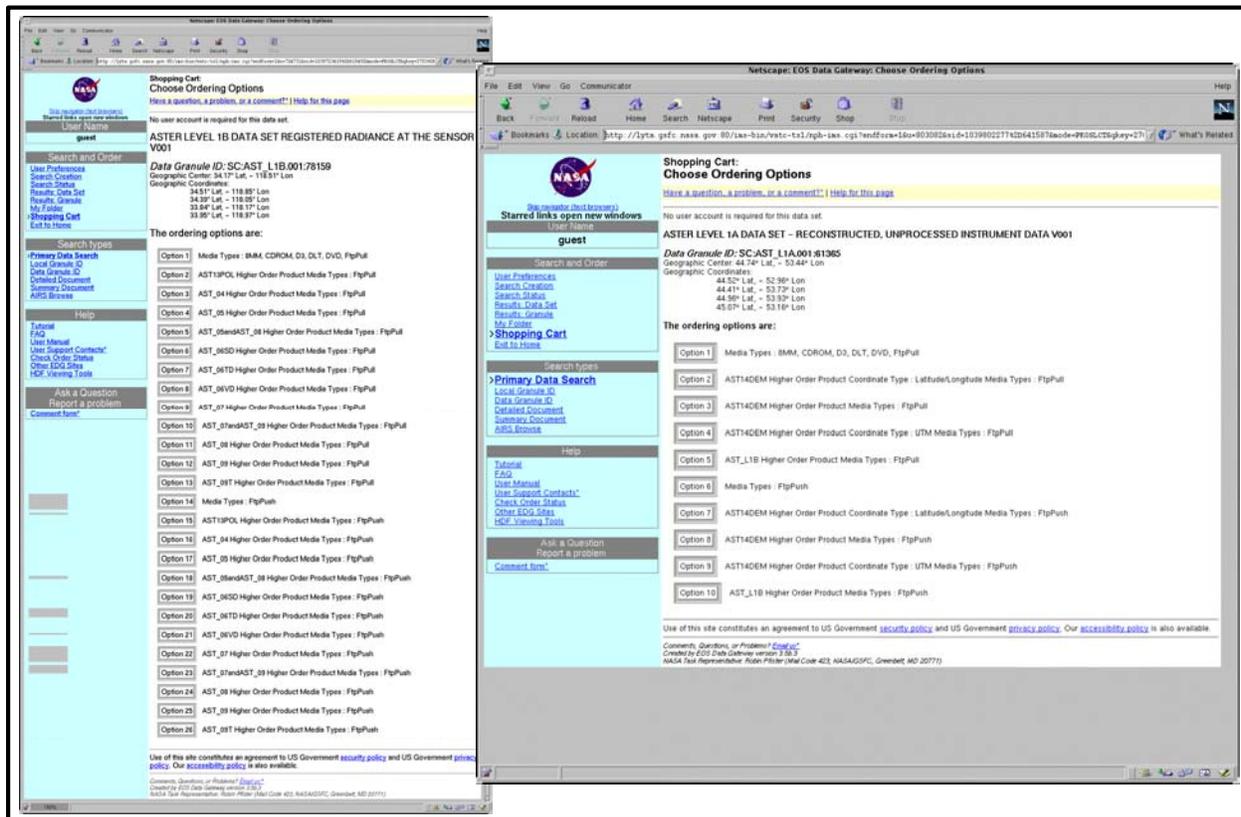


Figure 68. EDG: Ordering Options Selection screen

When the user clicks on the selection button for one of the options, the EDG displays a window like those shown in Figure 69. This window permits the user to select specific media options for the selected higher-level product, and then to return to the shopping cart.

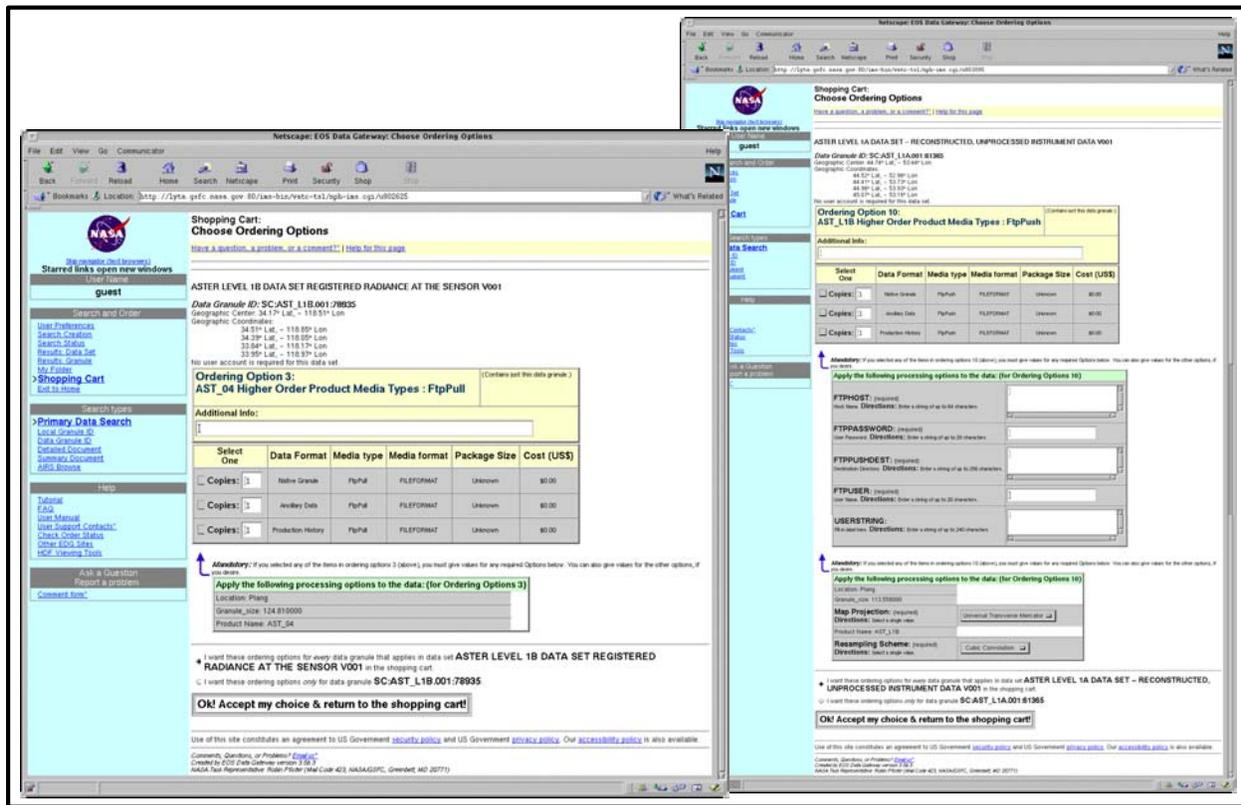


Figure 69. EDG Media Selection Window Examples

Back at the Shopping Cart window like that shown in Figure 70, the user can now go to the order form. From this point, completing the order information and submitting the order is similar to the procedure already presented in the section addressing use of the EDG for ordering data, using screens illustrated in Figure 18 and Figure 19 (see pages 63 and 64).

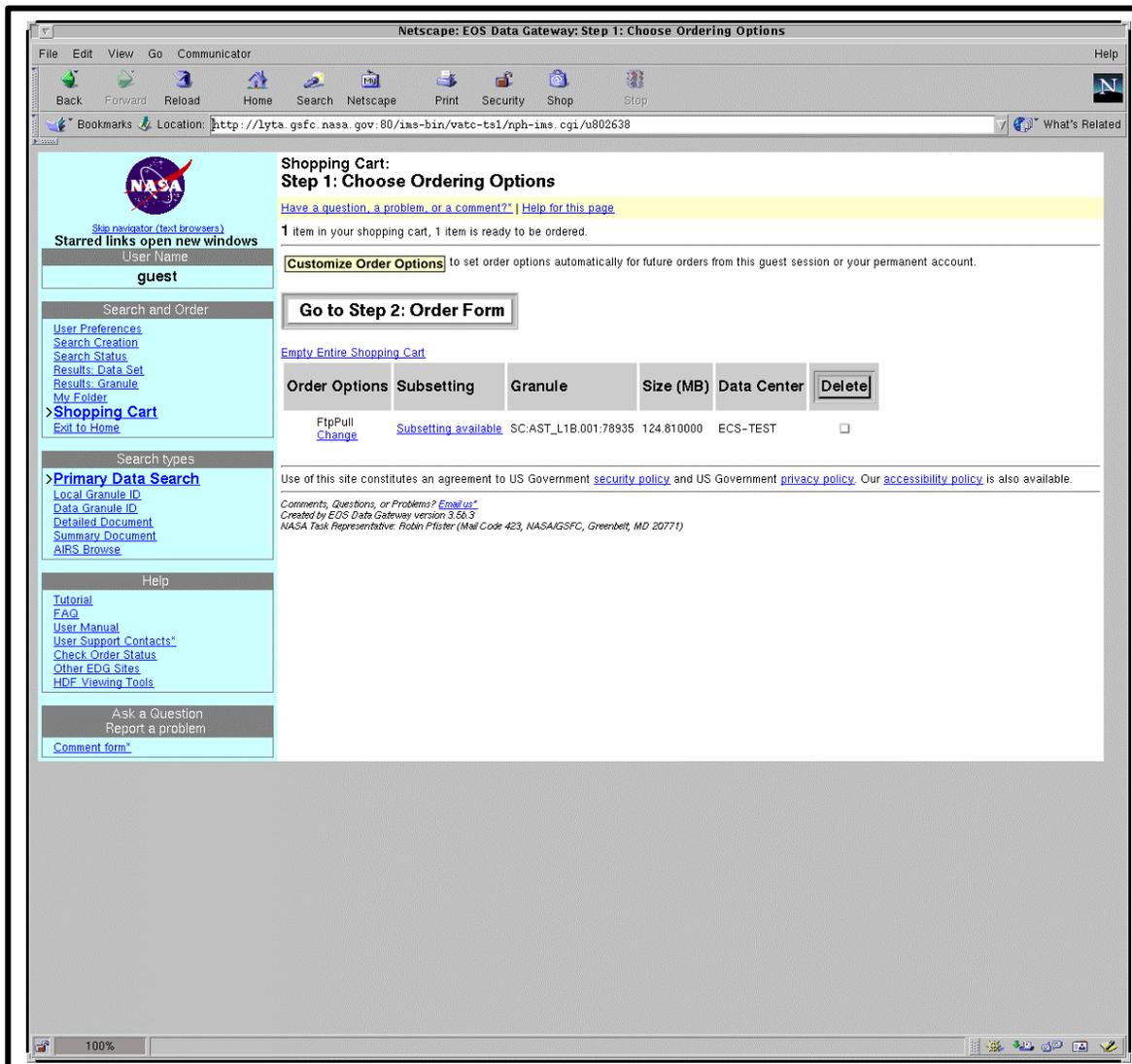


Figure 70. EDG: Shopping Cart: Go to Step 2: Order Form

Using the EDG for Submitting an ASTER On-Demand Request

The following procedure is applicable for using the EDG to prepare an On-Demand Product Request.

Using the EDG for Submitting an ASTER On-Demand Request

- 1 Launch Netscape, access the EDG tool, and conduct a search for the desired input data to be processed to generate a higher-level data product (see procedure **Locate and Order Data Using the EOS Data Gateway Search and Order Tool**, previous section of this lesson, Steps 1 – 19).
 - 2 When the results of the search provide one or more appropriate granules, click in the selection checkbox to the left of any desired granule.
 - The checkbox is filled to indicate its selection.
 - 3 Click on the **Add selections to cart** button.
 - The **Data Quality Summary** window is displayed with a description of the data type for the selected granule.
 - 4 Click on the **Continue to Shopping Cart** button.
 - The **Shopping Cart: Step 1: Choose Ordering Options** window is displayed.
 - 5 Click on the **Choose Options** link in the **Order Options** column next to the desired granule.
 - A list of ordering options is displayed, including options for higher-level data products that may be produced from the selected granule.
 - 6 Click on the desired option specifying the product and distribution media type.
 - The window displays a list of specific media for the higher-level data granule and related granules.
 - 7 Click on the selection box(es) for any desired media type(s)
 - The checkbox is filled to indicate its selection.
 - 8 Enter any mandatory information to specify required processing/ordering options.
 - The fields display entered information.
 - 9 Click on the **Ok! Accept my choice & return to the shopping cart!** button.
 - The **Shopping Cart: Go to Step 2: Order Form** window is displayed.
 - 10 Complete and submit the order using standard procedures (see procedure **Locate and Order Data Using the EOS Data Gateway Search and Order Tool**, previous section of this lesson, Steps 27 – 33).
 - The **order** is submitted and an **Order Submitted!** confirmation screen is displayed.
-

Practical Exercise

Introduction

This exercise is designed to practice key elements of the User Services procedures. Perform the tasks identified in the exercise.

Equipment and Materials

One ECS workstation.

Mission Operation Procedures for the ECS Project, 611-CD-610-002.

Respond to User Services E-Mail Messages

This exercise requires you to respond to several E-mail messages of the type you might receive as a User Services representative at a DAAC. Each message is introduced with a specific statement of the task required.

1. Prepare a written response to the following E-mail message from your supervisor listing five major responsibilities of User Services representatives at the DAAC. If necessary, refer to Section 19 of 611-CD-610-002, *Mission Operation Procedures for the ECS Project*.

To: URAreps@daac.gov

From: Tbosse@daac.gov

Subject: Briefing Support

In preparation for a briefing I am preparing for NASA Headquarters on our ECS Operations and staff, I am asking each of you to provide me with a list of your major responsibilities. As soon as you can, please submit a response, via E-mail or paper, listing at least five major requirements of your position. Thanks.

T. Bosse

2. Use Section 19.1.2 of 611-CD-610-002, *Mission Operation Procedures for the ECS Project* and the information you can extract from the following E-mail message to create a user account, including account information, personal information, shipping address, billing address, and mailing address.

To: URArep@daac.gov
From: a.scientist@unh.edu
Subject: User registration

I would like to order Earth Science data from your archives periodically for my research at the University of New Hampshire on seasonal models of carbon dioxide fluxes. Please register me as a user in the EOS Core System. David S. Bartlett has agreed to sponsor me for this registration. I am a geochemist working under his direction on the project to study Changes in Biogeochemical Cycles (principal investigator is Berrien Moore).

For data shipments, I would prefer to receive 8mm tape. The shipping address is:

Dr. Aya C. Scientist
Ocean Process Analysis Laboratory
University of New Hampshire
Durham, NH 03824
(Phone: 603-862-1157; Fax: 603-862-1915)

Other correspondence, including regular mail and any billing information, should be sent to:

Dr. Aya C. Scientist
Department of Earth Sciences, Morse Hall
University of New Hampshire
Durham, NH 03824
(Phone: 603-862-5337; Fax: 603-862-1911)

Thank you.

Aya C. Scientist

3. Use Section 19.2 of 611-CD-610-002, *Mission Operation Procedures for the ECS Project* to process the order represented by the following E-mail message, creating a User Contact Log record, ensuring that the user has a valid account, conducting the data search and placing the order, and updating the User Contact Log record to reflect completion of the order.

To: URArept@daac.gov
From: a.scientist@unh.edu
Subject: SeaWiFS data order

For an ongoing research project at my university, it is desirable to review some recent images of the ocean off the East Coast of the U.S. during the winter months. Images of the sort generated by the Sea-viewing Wide Field-of-View Sensor (SeaWiFS) on the Seasat platform would be ideal. Please conduct a search of the data available through GSFC and, if possible, order for me up to 10 granules from the SeaWiFS Level 1a data set showing any area in the North latitudes (60 degrees to 30 degrees) and longitude -90 degrees to -50 degrees during the months Jan - March 1996. If you need further information, you can reach me by return E-mail, or telephone at 603-862-5337. Thank you.

Aya C. Scientist

4. Use Section 19.3.1 of 611-CD-610-002, *Mission Operation Procedures for the ECS Project* and the ECS Data Order Tracking tool to find out the status of the user's order identified in the following E-mail message. Write a list of six things you should do in response to the following E-mail message. Then use system software tools to do those that you can perform without actual implementation of communications.

To: URArept@daac.gov
From: Imareptu@daac2.gov
Subject: Ozone data order, P. Fingerman

I'm forwarding this message I received concerning an ozone data order which I referred to you last week. Can you check into it for me. Fingerman's E-mail address is:

Pfingerm@eos.hitc.com.

Thanks!

Ima Reptu

Ima,

Please check on the status of my Antarctic ozone data (TOMS) order, which I sent you 8 days ago. I received notice that it had been ordered a couple of days later, but it hasn't arrived yet. Thank you for your help.

Paul Fingerman

5. Use Section 19.3 of 611-CD-610-002, *Mission Operation Procedures for the ECS Project* and the tools available on the User Services desktop to do what is necessary to respond to the following E-mail message, including creation of a User Contact Log record, validating the user, tracking and canceling the order, and updating the User Contact Log record to document the cancellation.

To: URArep@daac.gov
From: a.scientist@unh.edu
Subject: SeaWiFS data order cancellation

I just placed an order for up to 10 granules from the SeaWiFS Level 1a data set showing any area in the North latitudes (60 degrees to 30 degrees) and longitude -90 degrees to -50 degrees during the months Jan - March 1996. A change in project priorities has made the data unnecessary. Please cancel the order for me. If you need further information, you can reach me by return E-mail, or telephone at 603-862-5337. Thank you.

Aya C. Scientist

6. Use the Spatial Subscription Server web interface to set up a subscription to satisfy the request in the following E-mail message.

To: URArep@daac.gov
From: a.scientist@unh.edu
Subject: Subscription for notice of archive insertion of AST_08

Please register a subscription to notify me of any insertion into the ECS archive of the output of ASTER PGE ETS (the output product is AST_08). If you need further information, you can reach me by return E-mail, or telephone at 603-862-5337. Thank you.

Aya C. Scientist

Other Spatial Subscription Server Tasks

7. Launch the Spatial Subscription Server (NSBRV) GUI and display a list of ECS events for which a subscription can be created.
8. Using the NSBRV GUI, display subscriptions in the NSBRV database and filter the list to show only subscriptions for data with a selected short name. Filter the list again to display only subscriptions for data with a different short name.
9. Use the NSBRV GUI to add a subscription that will trigger a Data Pool insert when appropriate data of the type stored at your site are inserted into the archive, specifying a 30-day retention period. Then use the NSBRV GUI to extend the period of retention to 60 days and associate the subscription with a theme. Finally, use the GUI to delete the subscription from the NSBRV database.
10. Use the NSBRV Command Line Interface to view the contents of a subscription in the NSBRV database.
11. Use the NSBRV GUI to add a bundling order.
12. Use the NSBRV GUI to view any acquire and notification actions in the Action Queue.
13. Use the NSBRV GUI to display statistics on NSBRV processing of events and actions.
14. Launch the Data Pool Web Access tool and specify progressive refinements of search criteria to drill down to a small set of granules that a user might wish to download from the Data Pool.

Data Dictionary Task

15. Use the Data Dictionary Maintenance Tool to produce a valids export file in response to the following message. For this exercise, the specific collection you select for valids export is arbitrary; select any appropriate collection for your DAAC.

To: URAre@daac.gov
From: s.pervisor@daac.gov
Subject: ESDT addition

We have completed installation of a new ESDT for <any appropriate product>. Please initiate the process of getting valids for it exported to the V0 IMS team. Thanks!

Sue Pervisor

ASTER Tasks Specific to EDC

16. (Note: This exercise is specific to the EDC DAAC only.) You receive a telephone call from Dr. S. I. Entist requesting that you create an ASTER Data Acquisition Request for thermal infrared imagery over Nigeria, with maximum cloud cover less than 20%. The desired temporal specifications are 10-day acquisition windows at 16-day intervals. The coordinates of a rectangle including the desired area are:

000:00:00	000:00:00
005:00:00	000:00:00
005:00:00	020:00:00
000:00:00	020:00:00

Prepare and submit a DAR to specify Dr. Entist's request.

17. (Note: This exercise is specific to the EDC DAAC only.) You receive a telephone call from Dr. S. I. Entist requesting that you create a production request for ASTER AST-08 Surface Kinetic Temperature product from a known archived AST_09T granule with the granule ID of ASTER GDS_L2.001:2000003276. Use the EOS Data Gateway (EDG) tool to create the necessary production request.

Slide Presentation

Slide Presentation Description

The following slide presentation represents the slides used by the instructor during the conduct of this lesson.

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